SMEC

Member of the Surbana Jurong Group

SMEC INTERNAL REF. 30049113

Report

Casey Fields South and Devon Meadows PSP Land Capability Assessment

Client Reference No. A0580 and A2200
Prepared for: Victorian Planning Authority
10 February 2023

Through our specialist expertise, we deliver advanced infrastructure solutions for our clients and partners.

Leveraging our 70-year history of delivering nation-building infrastructure, we provide technical expertise and advanced engineering services to resolve complex challenges.

Through our network of global specialists collaborating with local partners, we connect you with the best teams and capabilities to deliver innovative and sustainable solutions.

We're redefining exceptional

Document Control

Document Type	Report
Project Title	Casey Fields South and Devon Meadows PSP Land Capability Assessment
Project Number	30049113
File Location	\\filer.nasuni.local\SMECANZ\Projects\300491\30049113 VPA Casey Fields Sth PSP LCA\03 Outputs\Reports\1 Draft\LCA Report
Revision Number	1

Revision History

Revision No.	Date	Prepared By	Reviewed By	Approved for Issue By
0	19 December 2022	S, Smallman, S Gill, A Vernon, S Chenoweth, H Bolton, K Velasco	J Cuttler, D Hartley	J Cuttler
1	10 February 2023	S Smallman, S Gill, A Vernon, S Chenoweth, H Bolton, K Velasco	J Cuttler, R Ash	J Cuttler

Issue Register

Distribution List	Date Issued	Number of Copies
Victorian Planning Authority	10 February 2023	1

SMEC Company Details

Approved by	Jo Cuttler
Address	Level 20, Tower 4/727 Collins Street, Docklands, VIC, 3008, Australia
Phone	+61 3 9514 1564
Email	Jo.Cuttler@smec.com
Website	www.smec.com
Signature	

Important Notice

This report is confidential and is provided solely for the purposes of Victorian Planning Authority This report is provided pursuant to a Consultancy Agreement between SMEC Australia Pty Limited ("SMEC") and Victorian Planning Authority, under which SMEC undertook to perform a specific and limited task for Victorian Planning Authority. This report is strictly limited to the matters stated in it and subject to the various assumptions, qualifications and limitations in it and does not apply by implication to other matters. SMEC makes no representation that the scope, assumptions, qualifications and exclusions set out in this report will be suitable or sufficient for other purposes nor that the content of the report covers all matters which you may regard as material for your purposes.

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.

The report supersedes all previous draft or interim reports, whether written or presented orally, before the date of this report. This report has not and will not be updated for events or transactions occurring after the date of the report or any other matters which might have a material effect on its contents, or which come to light after the date of the report. SMEC is not obliged to inform you of any such event, transaction or matter nor to update the report for anything that occurs, or of which SMEC becomes aware, after the date of this report.

Unless expressly agreed otherwise in writing, SMEC does not accept a duty of care or any other legal responsibility whatsoever in relation to this report, or any related enquiries, advice or other work, nor does SMEC make any representation in connection with this report, to any person other than Victorian Planning Authority. Any other person who receives a draft or a copy of this report (or any part of it) or discusses it (or any part of it) or any related matter with SMEC, does so on the basis that he or she acknowledges and accepts that he or she may not rely on this report nor on any related information or advice given by SMEC for any purpose whatsoever.

Contents

Appendices

Figures

Tables

Executive Summary

Victorian Planning Authority (VPA) engaged SMEC to conduct a Land Capability Assessment (LCA) for the Casey Fields South and Devon Meadows Precinct Structure Plan (PSP).

The Casey Fields South and Devon Meadows PSP area is located approximately 45km southeast of the Melbourne central business district . The Precinct covers an area of approximately 536 hectares, of which the Casey Fields South (CFS) Precinct comprises approximately 275 hectares, and the Devon Meadows (DM) Precinct comprises approximately 261 hectares. The PSP site boundary is shown in Figure 1 (Appendix A). The CFS Precinct is bounded by the South Gippsland Highway to the southeast, Clyde-Fiveways Road to the east and Ballarto Road to the north. The DM Precinct is generally bounded by the South Gippsland Highway to the north and east, Worthing Road to the south and Craig Road to the west. The LCA was completed with the understanding that the Casey Fields South PSP will predominantly comprise industrial land use, and the Devon Meadows PSP will likely comprise residential and commercial land uses.

The purpose of the LCA was to:

- Provide the VPA with a preliminary understanding of geotechnical, hydrological, hydrogeological, air quality, contamination and odour conditions within the Precincts.
- Identify risks during development of the Precincts.

Provide recommendations for management of identified risks and further investigation.

The scope of the Assessment included:

- A desktop assessment of plans and previous assessment reports provided by the VPA.
- A desktop assessment of publicly available information relevant to the sites' condition in regards to contamination, air emissions, geotechnical and hydrological aspects.
- Inspections of fifty-three sites within and surrounding the Casey Fields South and Devon Meadows PSP areas.
- Preparation of a report detailing the findings of the LCA.

Some of the key findings of the Assessment, potential risks identified, and management options are summarised below.

Contamination

- The PSP has had mixed uses over its history, including quarries, market gardens, flower nurseries, poultry farms, agricultural farms, and rural residences.
- Twenty-one properties were assessed as presenting a high potential for contamination. The current and/or former activities at these sites include sewage treatment, service stations, flower growing, and quarrying.
- Forty-one properties were assessed as presenting a medium potential for contamination. The current and/or former activities at these sites include egg farming, scrap metal recovery, and agriculture.

The following recommendations should be considered to manage the contamination risks identified:

- Completion of Preliminary Risk Screening Assessments (PRSAs) at the thirty-seven properties identified as posing a 'medium' potential for contamination and a proposed sensitive use.
- Application of an Environmental Audit Overlay (EAO) to the twenty-three properties identified as posing a 'high' potential for contamination and a proposed sensitive use.
- Completion of a hazardous materials assessment for existing properties to assess for asbestos-containing materials and lead-based paints.
- Removal of underground storage tanks (USTs) on a site-by-site basis during future site development.
- Removal of septic tanks followed by soil validation. Intrusive groundwater investigation should be considered if impacts to groundwater are likely.

- Classification and removal (if required) of stockpiles and dumped surface waste observed at sites across the PSP areas.

Geotechnical

The following key geotechnical risks were identified:

- Ground improvement may be required in areas of excessive topsoil, fill and/or soft to firm clays, particularly in Quaternary Peaty Clay (Q5) material.
- Cemented sand is expected to be encountered within Q2 material, potentially impeding excavation progress and site drainage.
- High likelihood of variable top of rock levels and rock weathering characteristics due to the presence of Older Volcanics basalt and geological complexity from varying geologies across the site.
- Potential trafficability issues with exposure of surficial high plasticity clays of Older Volcanics and Quaternary origin to moisture.
- Potential excavatability issues with shallow rock and basalt 'floaters' requiring over-excavation and replacement with structural fill.
- Sands and non-expansive clays expected to be encountered within Quaternary and Baxter Sandstone geologies may be re-used as structural fill, depending on material characteristics and type of use.
- Settlement of future infrastructure due to nearby historic mine use, subsurface material susceptibility to settlement, scale and sensitivity of proposed structure, and any long-term or permanent dewatering for development excavations.

The following recommendation should be considered to manage the geotechnical risks identified:

- Further geotechnical site investigations are required for future design and construction stages.

Soils

The upper subsoils throughout the PSP are expected to be non-sodic. However, sodic soils may be present at depth throughout the PSP area. The Casey Fields South portion of the PSP area is more likely to present sodic/dispersive risk particularly within and fringing the urban drainage lines.

The following recommendations should be considered:

- All land developers should be required to further investigate and identify potential existence of sodic and dispersive soils to assess vulnerability for erosion if exposed or disturbed.
- Any soil profiles with clay in topsoil or subsoil identified in the study area should be assumed as having some sodic / dispersion risk that should be managed by the developer when making development applications to Council.
- Erosion and sediment control (ESC) plans should identify effective procedures to stabilise the soils.

Hydrogeological

The main aquifer in the PSP is the Baxter Sandstone which may be relatively permeable where coarse grained in nature and weathered; however, areas where clay content is high or it is ferruginised or silicified may reduce its permeability.

- Groundwater is expected to be encountered at shallow depths in parts of the site. Visualising Victoria Groundwater (VVG) mapping indicates depth to groundwater across majority of the PSP is <5m, with portions of depth between 5-10m concentrated in the south of the PSP and areas of 10-20m depth in the north.
- Groundwater flow directions are expected to follow topographic gradients which generally slope down from the north-west corner of site to the south-east corner of the site.
- VVG groundwater salinity mapping indicates the groundwater in the Casey Fields South and Devon Meadows PSP area ranges between 3,500-7,000 mg/L TDS over the majority of the PSP area, with a small portion of the PSP (along the north) ranging between 1,000 – 3,500 mg/L TDS.

The following recommendations should be considered:

- Installation of groundwater monitoring bores should be considered to better understand the depth to groundwater and water quality so as to inform future design and construction stages.
- Inspections of identified terrestrial groundwater dependent ecosystems (GDE) by an ecologist should occur to assess impacts that may occur from development and any mitigation measures that may be required.
- Monitoring of existing groundwater bores to confirm groundwater conditions based on the risk of the proposed land use affecting groundwater or impacts of groundwater on below-ground infrastructure.
- Due to the brackish nature of the groundwater in the PSP, it may require careful monitoring if dewatering or extraction is required during construction works within the PSP, particularly for the consideration of the disposal of water.

Hydrological

The general topography of the site drains from north west to south east direction. The catchment are predominantly farming zone and low density residentials with low impervious areas producing runoff, except for areas towards the north and west where it consist of new and established residential developments. The drainage lines are generally undefined and can be described as overland flow paths traversing roads, farmland and private low density properties.

The Planning Scheme Zone shows flood related overlays across the site including Land Subject to Inundation overlay (LSIO) and Urban Floodway Zones (UFZ). The zones and overlays indicate flooding will need to be considered and addressed in developing the site.

The following recommendation should be considered:

- Geomorphological assessment of waterways to assess their current condition and likely impacts from hydrology and hydraulics in future development. This task should be undertaken as part of the planning stage of works.

Potential Adverse Amenity Impacts

Adverse amenity can be described as locations which have the potential to negatively impact an area through environmental disruption via excess noise, negative visual impact, or degradation of air quality, among several others.

Air Quality/Odour

The site inspection reported observation of odours in proximity to industrial activities within the PSP area including Flower Farms / Nurseries, Poultry Farms and Construction Material Wholesalers. Dust was observed from vehicles using unsealed roads.

The following recommendation should be considered to manage the air quality risks identified:

- Prior to any land-use planning changes or upgrades, a detailed assessment of buffer zones is conducted using the VicEPA Separation Distance Guideline (Publication 1949).

Noise

The following observations were made during site inspections:

- The South Gippsland Highway and main roads (Ballarto Road, Clyde-Five Ways Road, Craig Road, and Fisheries Road) were reported to have moderate to loud traffic noise.
- Commercial enterprises along Devon Road were reported to have low to moderate noise levels associated with machinery, vehicles and processes at these sites.

The following recommendation should be considered:

- Noise monitoring along South Gippsland Highway and other major roads in the PSP area (Ballarto Road, Clyde-Five Ways Road, Craig Road, and Fisheries Road).

This executive summary should be read in conjunction with the full report.

1 Introduction

1.1 Background and objectives

Victorian Planning Authority (VPA) engaged SMEC Australia Pty Ltd (SMEC) to undertake a Land Capability Assessment (LCA) of the proposed Casey Fields South and Devon Meadows Precinct Structure Plan (PSP) area, hereafter referred to as the 'Casey Fields South and Devon Meadows PSP' or 'CFS and DM PSP'.

The VPA and other planning authorities prepare plans for places that enable best practice, liveable new communities.[1] A precinct structure plan is a high level strategic plan prepared by a planning authority that sets out the preferred spatial location of land uses and infrastructure to guide staging of development, subdivision permits, building permits and infrastructure delivery.[2] Informed land use planning plays a vital role in protecting the environment, human health and amenity. Precinct planning can help to avoid potential negative impacts on the community and the environment. Potential negative impacts may include noise, odour, dust, air pollutants and stormwater contamination. The nearby environment can also affect land uses, for example, from contamination from land and groundwater or landfill gas migration. Land use planning allows for risks to be identified early in the planning process and for harmful outcomes to be avoided.[3]

The VPA is leading the preparation of a PSP for the Casey Fields South Precinct and the Devon Meadows Precinct, working in partnership with the City of Casey, state government agencies and service authorities. The two precincts are adjacent to one another, located on the edge of the Urban Growth Boundary within the City of Casey municipality, sharing the South Gippsland Highway as a boundary[4].

The Casey Fields South and Devon Meadows PSP area is located approximately 45km southeast of the Melbourne central business district. The Precinct covers an area of approximately 536 hectares, of which the Casey Fields South (CFS) Precinct comprises approximately 275 hectares, and the Devon Meadows (DM) Precinct comprises approximately 261 hectares. The PSP site boundary is shown in Figure 1 (Appendix A). The CFS Precinct is bounded by the South Gippsland Highway to the southeast, Clyde-Fiveways Road to the east and Ballarto Road to the north. The DM Precinct is generally bounded by the South Gippsland Highway to the north and east, Worthing Road to the south and Craig Road to the west. It is understood that the CFS Precinct is planned to provide industrial and employment opportunities, and the DM Precinct is likely to provide residential and commercial opportunities.

The purpose of this LCA is to assess the existing environmental conditions, and potential impacts caused by existing or past land uses, in the 'Casey Fields South and Devon Meadows PSP' study area and identify:

- Areas of potential sodic/dispersive soils;
- Potential soil and/or groundwater contamination, geotechnical and hydrological variables;
- Existing adverse amenity land uses;

and then to assess the associated effect on the viability of developing land within the study area.

The assessment comprised two stages where;

- Stage 1 involved a review of the history of land use at the site and a preliminary desktop review of information, and
- Stage 2 involved visual inspections of selected properties within the Casey Fields South and Devon Meadows PSP area, and then further desktop assessment of risks, constraints and opportunities related to potential contamination, hydrogeology, hydrology, geomorphology, geotechnical and/or adverse amenity within the PSP area.

Intrusive site investigations have not been conducted at this stage, but site inspections were conducted at 53 selected properties on 23 and 28 November 2022, primarily for the purpose of assessing potential issues relating to contamination. This report includes the findings of both the Stage 1 and 2 assessments completed.

[1] Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021)
[2] Victorian Planning Authority – Guidance Note – PSP2.0 – November 2021
[3] https://www.planning.vic.gov.au
[4] https://vpa.vic.gov.au/project/casey-fields-south-devon-meadows/

1.2 Scope of works

The following scope of work was undertaken at the site:

- **Stage 1** – This desktop assessment stage comprised the review and collation of relevant information (including government databases and mapping, and reports provided by the City of Casey) for the purposes of identifying potential sources of contamination, hydrogeological, hydrological, geomorphological, and geotechnical issues across the Casey Fields South and Devon Meadows PSP area; and
- **Stage 2** – This assessment included the selective inspection of properties within the Casey Fields South and Devon Meadows PSP area. This stage focused on potential contamination sources which were identified to represent a high risk of contamination during the Stage 1 desktop study, and adverse amenity, including noise, dust, odour and visual amenity. General observations relating to significant land features and hydrological features identified during the desktop review were also made, where applicable.

The approach and findings of the assessment, together with supporting information, are documented within this report.

2 Regulatory framework

2.1 Relevant legislation and policies

2.1.1 Planning and Environment Act 1987 and PSP 2.0

The *Planning and Environment Act 1987* (P&E Act) was introduced to create a framework for planning the use, development and protection of land in Victoria. As a result, it sets out the procedures for preparing and making amendments to the Victorian Planning Provisions and planning schemes. This Act does not specifically prescribe the scope of planning in Victoria, rather there are specific subordinate instruments like Victorian Planning Provisions, planning schemes, regulations and Ministerial Directions which obtain legal status from the P&E Act.

Precinct structure plans are incorporated into the local planning schemes once the process is complete. The process is set out in the Precinct Structure Planning Guidelines prepared by the VPA. This guideline is based on planning for 20-minute neighbourhoods, a principle in *Plan Melbourne 2017-2050* that advocates for living locally to ensure accessible, safe and attractive local communities.

PSP 2.0 – is part of the VPA's PSP reform agenda, delivering outcomes focused on vision, purpose and place in partnership with landowners, agencies, councils and local communities. The PSP 2.0 process involves co-designing the PSP with key stakeholders, streamlining PSP preparation and optimising the PSP product to embrace innovation and deliver Victorian Government policy. This Guidance Note provides an overview of the key process steps for the preparation of PSPs in accordance with the VPA's new PSP 2.0 process.

The land capability assessment forms part of a suite of land capability studies to support early planning decisions and identify any land constraints within the precinct.

Planning authorities must satisfy themselves that the land within the PSP area is suitable for its future use.

2.1.2 Ministerial Direction No. 1 – Potentially Contaminated Land

Ministerial Direction No 1 (MDN1) applies to potentially contaminated land. The purpose of the MDN1 is "*to ensure that potentially contaminated land is suitable for a use which is proposed to be allowed under an amendment to a planning scheme and which could be significantly adversely affected by any contamination.*"

Where land is potentially contaminated within the PSP area and is likely to be rezoned for sensitive use such as residential, education or childcare, the Planning Authority must satisfy itself that the land is suitable through an environmental audit.

2.1.3 Ministerial Direction No. 19

Ministerial Direction No.19 requires planning authorities to seek early advice from the EPA when undertaking strategic planning developments and preparing planning scheme amendments that may significantly impact the environment, amenity and/or human health in Victoria.

The Ministerial Requirement for Information requires planning authorities to give the Minister for Planning the following information when applying for authorisation to prepare an amendment under sections 8A or 8B of the Planning and Environment Act 1987, or preparing an amendment under section 9 of the Planning and Environment Act 1987:

- "the written views of EPA, including any supporting information and reports"; and
- "a written explanation of how the proposed amendment addresses any issues or matters raised by EPA".

2.1.4 Planning Practice Note 30

The purpose of Planning Practice Note 30 (PPN30) is to guide planners and applicants on:

- Identifying potentially contaminated land
- The appropriate level of contamination assessment that should be conducted in different circumstances

- The appropriate provisions in planning scheme amendments
- Appropriate conditions for planning permits

Table 2 in PPN30 lists land uses that have the potential to contaminate land, including several land uses/activities relevant to rural residential areas such as those associated with the Casey Fields South and Devon Meadows PSP area.

Table 3 of the PPN30 indicates that a PRSA is required, as a minimum, for any site that has a *medium* potential for contamination, while an Environmental Audit is recommended for sites with a *high* potential for contamination. An extract of Table 3 of PPN30 is provided below for reference.

Where land has been determined to be potentially contaminated but it is difficult or not appropriate to undertake the environmental audit system requirements at the time of the planning scheme amendment, then the application of the Environmental Audit Overlay (EAO) to the land allows deferment of these requirements. Applying the EAO ensures the requirements (to complete a PRSA and / or environmental audit) will be met in the future but does not prevent the assessment and approval of a planning scheme amendment.

Planning Proposal		**Potential for Contamination**	
		High	**Medium**
Uses defined in *Ministerial Direction No. 1*, the EAO, and clause 13.04-1S			
• Sensitive uses: Residential use, childcare centre, kindergarten, pre-school centre, primary school, even if ancillary to another use. • Children's playground • Secondary school	New use, or buildings and works associated with a new use	A	B
	Buildings and works associated with an existing use	B	B
Other land use			
Open space Agriculture Retail or office Industry or warehouse	New use, or buildings and works associated with a new or existing use	C	D

	Planning Scheme Amendment	**Planning Permit Application**
A	PRSA or audit option applies Proceeding directly to an audit is recommended.	PRSA or audit option applies Proceeding directly to an audit is recommended.
B	PRSA or audit option applies PRSA to determine need for audit is recommended.	PRSA or audit option applies PRSA to determine need for audit is recommended.
C	PSI to inform need for audit is recommended	PSI to inform need for audit is recommended
D	Planning authority to document consideration of potential for contamination to impact proposal	Responsible authority to document consideration of potential for contamination to impact proposal

Note: Where land is used for more than one purpose, the most sensitive land use should be used to inform the approach to determining if an audit is required.

2.1.5 Environment Protection Act 2017

The Victorian *Environment Protection Act 2017* (as amended in 2018) (EP Act) provides a legislative framework that serves to protect Victoria's environment and human health. The Act includes:

- The General Environmental Duty (GED) that applies to all Victorians. This duty is to reduce the risk of harm to human health and the environment, and from pollution and waste.
- A tiered system of EPA permissions based on the level of risk to human health and the environment.
- Significant penalties for individuals or businesses who commit environmental harm.
- Provision for Preliminary Risk Screening Assessments (PRSAs) to establish the need for an Environmental Audit.
- Provision for Environmental Audits to assess the suitability of a site for its use. Audits are conducted by EPA-accredited Environmental Auditors and can involve a desktop review of a site's history, and soil and groundwater analysis. The issue of a certificate of environmental audit indicates that the audited site can have unrestricted land use, whereas a statement of environmental audit excludes specific land uses or states that a land use is suitable under specified conditions.

2.2 Guidelines and standards for assessment of contaminated land

2.2.1 National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)

The National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) (NEPM) establishes a nationally consistent approach to the assessment of site contamination. It ensures that sound environmental management practices are upheld by regulators, Environmental Auditors, landowners, developers and industry. Guidance is provided on the assessment of site contamination, investigation levels for environmental contaminants, human health and environmental risk assessment and reporting requirements.

2.2.2 Australian and New Zealand Guidelines for Fresh and Marine Water Quality

The Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018) provide guidance on the management of water quality for water resources (natural and semi-natural) in Australia and New Zealand. The guidelines specify trigger values for water quality for the protection of environmental values. These values include recreation, irrigation, drinking water, and ecological values.

The ANZG (2018) guidelines replaced the previous guidelines published in 2000 (commonly referred to as the ANZECC 2000 guidelines) and have been adopted and referenced as the most contemporary guidelines in the new Environment Reference Standard.

2.2.3 Environment Reference Standards

The Victorian Environment Reference Standard (ERS) is a new subordinate instrument which came into effect on 1 July 2021 (alongside the amended *Environmental Protection Act 2017*). The ERS is itself made up of many 'reference standards', that cover ambient air, ambient soundland, and water (surface water and groundwater).

The ERS identifies environmental values that the Victorian community want to achieve and maintain. The ERS provides a way to assess if these environmental values are being achieved, maintained, or threatened.

The *Planning and Environment Act 1987* requires planning and responsible authorities to:

- consider environmental protection in decisions,
- refer certain applications to EPA for advice on the risk of harm to human health and the environment associated with land use and development, and
- consider, where appropriate, instruments under the EP Act including the Environment Reference Standard.

2.2.4 Australian Standard AS1726-2017: Geotechnical Site Investigations

Australian Standard AS1726 establishes the requirements for effective geotechnical site investigations and provides a system for the description and classification of soil and rocks.

The standard addresses spatial and physical properties of rocks, soil and groundwater, but does not cover chemical and biological aspects of the investigation of contaminated ground. AS1726 applies to geotechnical site investigation of natural and filled land for new construction, maintenance of existing facilities, evaluation of post-construction performance, the assessment of failure, and broad geotechnical studies.

2.3 Victorian Air quality legislation and guidelines

2.3.1 Environmental Protection Act 2017

The Environment Protection Act 2017 (as amended by the Environment Protection Amendment Act 2018) and its subordinate legislation govern the air quality in Victoria to protect human health and the environment from pollution and waste. It defines pollution as:

> *"Pollution includes any emission, discharge, deposit, disturbance or escape of – a solid, liquid or gas, or a combination of a solid, liquid or gas, including but not limited to smoke, dust, fumes or odour".*

The introduction of GED into the Environmental Protection Act 2017 changes the focus of compliance and enforcement by allowing the consideration of risks from any pollution sources, not just those that are specifically regulated. As GED requires the risk of harm from air pollution to be minimised as far as reasonably practicable, the following matters are relevant:

- The likelihood of the risk eventuating
- The degree of harm that would result if the risk eventuated
- State of Knowledge: what the person knows, or ought reasonably to know about harm or risks of harm and any ways of eliminating or reducing those risks.

GED seeks to eliminate or otherwise reduce risks of harm to human health and the environment from pollution and waste. GED applies to any person engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste. It requires that person to eliminate or otherwise reduce those risks, so far as reasonably practicable.

2.3.2 Subordinate legislation

Subordinate legislation is the group of tools that support the amended Environment Protection Act 2017. These tools include Environment Protection Regulations and the Environment Reference Standard (ERS). The new Regulations provide clarity and further detail for duty holders on how to fulfil their obligations through guidance documents.

The ERS comprises a set of reference standards covering four aspects of Victoria's environment including ambient air. Part 2 of the ERS sets the ambient air quality indicators and objectives to support desirable environmental values, such as air quality that sustain life, health and well-being of humans as well as other forms of life including the protection of ecosystems and biodiversity.

Part 2 of the ERS replaces the State Environment Protection Policy (Air Quality Management) and generally adopts the standards in the NEPM AAQ with some modifications.

2.3.3 EPA Guidelines

2.3.3.1 Separation distance guideline – Publication 1949

In December 2022 EPA released a draft update to the Separation Distance Guideline (Publication 1949). The purpose of the guideline is to support land use and development decisions that:

- protect the community from human health and amenity risks associated with unintended offsite odour and dust impacts generated by industry

- protect industry from inappropriate land use and development nearby that may constrain operations.

Separation distances are necessary to account for potential unintended offsite emissions expected as part of the day-to-day operation of industrial land uses. Such emissions may occur due to:

- the nature of the operation
- slight changes in weather conditions
- minor accidents
- minor equipment failure.

Unintended offsite emissions may still occur even when an industrial land use is operating in accordance with all relevant statutory obligations, including minimising the risk of harm to human health or the environment from pollution and waste so far as reasonably practicable. Separation distances allow unintended emissions to disperse, and in doing so, minimise human health and amenity risks for any nearby sensitive land uses.

The guideline is intended for planning authorities, responsible authorities, industry, developers, the community and EPA. It provides guidance on what to consider when preparing and assessing planning scheme amendments, planning permits and EPA permissions applications.

2.3.3.2 Guideline for assessing and minimising air pollution – Publication 1961

In May 2022 EPA produced new air quality guidance called "*Guideline for assessing and minimising air pollution in Victoria*" (EPA Publication 1961, 2022). The aim of Publication 1961 is to help businesses understand, assess and minimise risk from air emissions.

The guideline provides:

- a framework for assessing risks to the environment and human health from air emissions
- new air quality assessment criteria which replace the design criteria in the State Environment Protection Policy for Air Quality Management (SEPP AQM)
- modelling, monitoring and risk assessment methods
- guidance on how to minimise air emissions and manage any remaining risks.

2.3.3.3 Guidance for assessing odour – Publication 1883

In June 2022 EPA released "*Guidance for Assessing Odour*" (Publication 1883) that outlines how to assess odour risk posed by odour emission sources. The guidance is focused on the assessment of odour under the provisions of the *Environmental Protection Act 2017*, including the General Environmental Duty, which requires all Victorians to take precautionary and reasonable action to avoid hazards causing harm.

2.3.3.4 Urban Stormwater management Guidance Publications – Publication 1739.1

Uncontrolled urban stormwater runoff poses a risk to the values of waterways and bays. Publication 1739.1 (2021) is intended to help improve the management of urban stormwater in Victoria by recognising current science and the risk of harm from urban stormwater flows.

The guidance relates to stormwater run-off from urban areas in Victoria. It addresses key environmental risks associated with generating new impervious surfaces, covering pollutant loads and flow impacts on the environment. While it covers a range of environmental risks, it provides environmental objectives for only a subset of these risks.

3 Methodology

3.1 General assessment approach

3.1.1 Stage 1 Assessment

A Stage 1 assessment (Phase 1 Environmental Site Assessment (ESA)) was undertaken to gather findings to be used to inform the next steps of the LCA.

The methodology consisted of a high-level desktop review of the following information sources:

- Lotsearch report (Reference: LS035757 EL)
- Sodic Soil Mapping
- EPA Victoria (Victoria Unearthed) Mapping
- Records provided by the City of Casey
- Visualising Victoria's Groundwater (VVG) Mapping
- Australian Soil Resource Information System (ASRIS) Mapping of Acid Sulfate Soils
- Groundwater Dependent Ecosystems (GDE) Atlas, Australian Bureau of Metrology
- National Pollutant Inventory (NPI) database

The information was used to assess the following site conditions:

- Sodic and Dispersive Soils
- Potential Soil and/or Groundwater Contamination
- Geotechnical and Hydrological Variables
- Existing Adverse Amenity Land Use
- Existing Noise Environment
- Potential source of Air Quality (Existing Setting)

The Stage 1 assessment seeks to identify:

- The potential source(s) of on- and off-site contamination;
- Pathways and receptors of contamination; and
- Areas of environmental concern (contamination, hydrogeological and geotechnical) which will form the basis of subsequent assessments at the site.

3.1.2 Stage 2 Assessment

For this particular investigation, the site inspection works are referred to as a Stage 2 assessment.

A Draft Land Capability Assessment Report was prepared outlining findings and recommendations from the desktop review and site visit. The report includes:

- A project summary, including assessment undertaken, findings, implications of findings and recommendations.
- Recommendations for future testing and detailed investigations.
- Recommendations in relation to the location of sensitive uses and any appropriate buffers (based on legislative requirements, or 'best practice') including a map indicating the extent and location of buffers from sources of contamination, adverse amenity land uses, and geotechnical and hydrological variables.

The Land Capability Assessment Report was finalised based on review comments from the VPA.

4 Precinct description

General information relating to the Casey Fields South and Devon Meadows PSP area is presented in Table 4-1 below.

Summary of precinct description details

Table 4–1 Overview of Casey Fields South and Devon Meadows PSP area

General Site information	
PSP Name:	Casey Fields South and Devon Meadows PSP
PSP Address:	**Casey Fields South Precinct** bounded by the South Gippsland Highway to the southeast, Clyde-Fiveways Road to the east and Ballarto Road to the north **Devon Meadows Precinct** generally bounded by the South Gippsland Highway to the north and east, Worthing Road to the south and Craig Road to the west
Total PSP Area (m^2)	Approximately 536 Ha • Casey Fields South Precinct covers an area of about 275 ha • Devon Meadows Precinct covers an area of about 261 ha
Planning Authority:	City of Casey
Current Planning Scheme Zones:	• Urban Growth Zone (UGZ) • Farming Zone (FZ) • Urban Floodway Zone (UFZ)
Planning Scheme Overlays	• Land Subject to Inundation Overlay (LSIO) • Public Acquisition Overlay (PAO4) at 40W Craig Road and 48W Craig Road and PAO3 represents small portions of land at 32-34 and 36-38 Craig Road in Devon Meadows.
Current Site Uses	• Industrial • Residential (low and high density) • Rural Living • Commercial • Agricultural • Education (childcare centres and schools) • Roads
Surrounding Land Use (outside of 1 km buffer):	• North – Residential and commercial (Casey Stadium etc) • South – Low-density residential and rural residential • East – Agriculture and rural residential • West – Residential and agricultural

5 Environmental setting

5.1 Topography

The topography of the study area is typically undulating dune fields and gently undulating to flat alluvial plains. The surface elevation of the PSP is between 21 m AHD to 54 m AHD (Lotsearch© 2022). The higher areas are associated with the undulating lands and dune fields in the west of the study area – west of Gissplan Hwy. Lower elevations are associated with the alluvial plains to the east and south of the study area (east of Gippsland Hwy) which contain various man-modified drainage lines flowing to the south east.

Elevation contours are shown in the Lotsearch report (Appendix E), and relative slopes in Figure 6 provided in Appendix A.

5.2 Geology

The geology of the PSP has been interpreted from Geological Geosciences Australia Geological Mapping and is summarised below, in five sections of the PSP, which are shown in Figure 5-1:

- Section 1 North: Red Bluff Sandstone (Nbr) with portion of Land dune deposits (Qd1)
- Section 1 South: Land dune deposits (Qd1) with portion of Murrindindi Supergroup (SM)
- Section 2 North: Red Bluff Sandstone (Nbr) with portion of Land dune deposits (Qd1)
- Section 2 South East: Red Bluff Sandstone (Nbr) with portion of alluvium and colluvium (Qb)
- Section 2 South West: Land dune deposits (Qd1) with portion of Red Bluff Sandstone (Nbr)

Further detail of the regional geology is provided in Section 7.2.

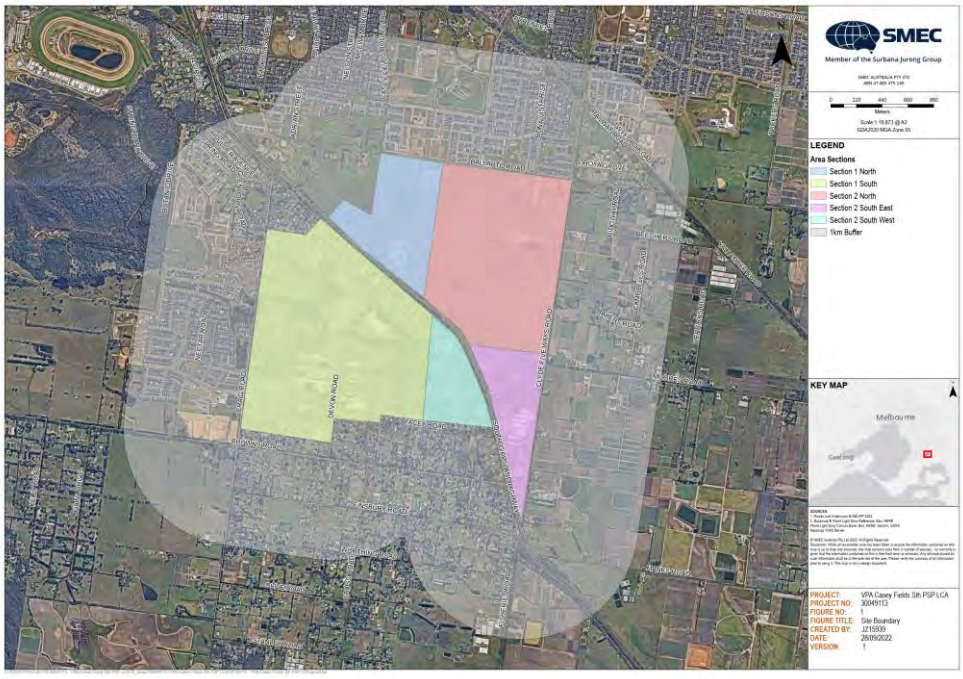


Figure 5-1 Division of the PSP into five sections for discussion.

5.3 Soils and Land Systems

The Lotsearch Report (Victorian Soil Type Mapping in Appendix E, and Figure 5-2 below) indicates a range of soil types and land systems within the study area.

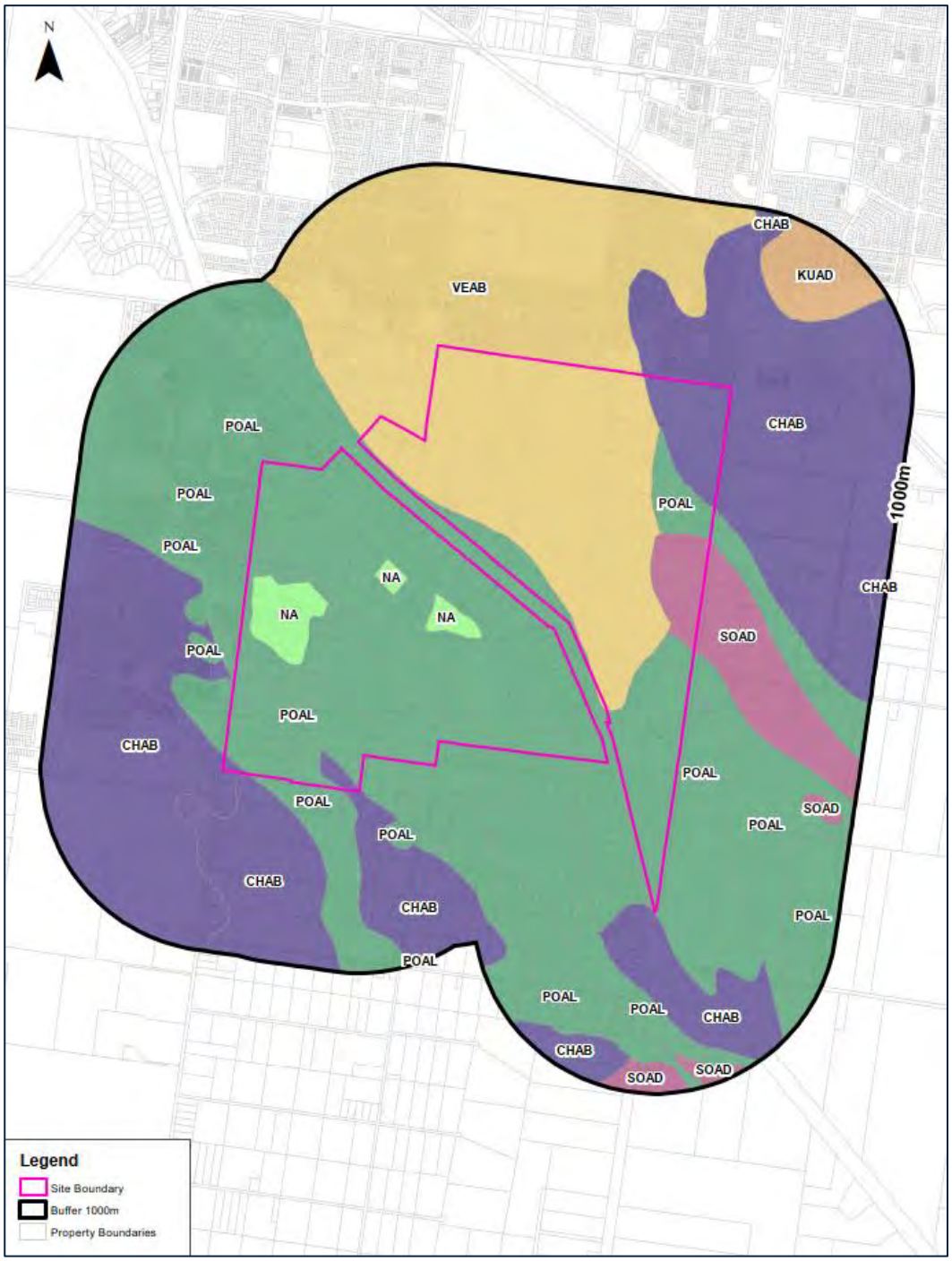


Figure 5-2 Map of soil types within 1000m of the PSP area (Lotsearch 2022. Data source: DELWP)

The soil descriptions and associated land systems associated with the Lotsearch map are summarised below:

Table 5-1 Descriptions of soils and Landsystems in PSP area (Lotsearch© 2022)

Soil Classification	Land System	Soil Profile description
Brown vertosols (VEAB)	Flinders clay	Clays (non-sodic at surface). Potentially dispersive and sodic at depth (lower B horizon), potentially increasing salinity with depth.
Aeric Podosols (POAL)	Cranbourne sands, Pearcedale sandy clay loam	Deep profile sandy dune soils (non-sodic) that are rapidly drained throughout the soil profile. Sandy

		loam surface soils (non-sodic) over medium/heavy clays (potentially sodic) within and adjacent to drainage lines.
Grey sodosols (SOAD)	Toomuc Sandy Loam and Cranbourne Sand	Sandy and sandy loam surface soils (non-sodic) with a clear change in texture between A and B Horizons, where the upper B horizon of light/medium clays is potentially sodic.
Brown Chromosols (CHAB)	Langwarrin Loam, Cranbourne Sand, Hallam Loam	Loamy and sandy surface soils (non-sodic) with a clear change in texture between A and B horizons, where the upper B horizon of medium to heavy clays is potentially sodic.

The dominant soil types in the five distinct sections of the PSP (as shown in **Figure 5-1**) are as follows:

- Section 1 North: Brown vertosols (VEAB) and portion of Aeric Podosols (POAL)
- Section 1 South: POAL and sections of unidentified soils (associated with quarries)
- Section 2 North: VEAB, POAL, Grey sodosols (SOAD), and Brown Chromosols (CHAB)
- Section 2 South East: POAL with portion of VEAB and SOAD
- Section 2 South West: POAL

Due to private land and other site-safe access constraints, the soil descriptions above were unable to be ground-truthed or validated during site inspections.

Further details of geotechnical soil characteristics are provided in Section 7.2.2.

5.4 Sodic and Dispersive Soils

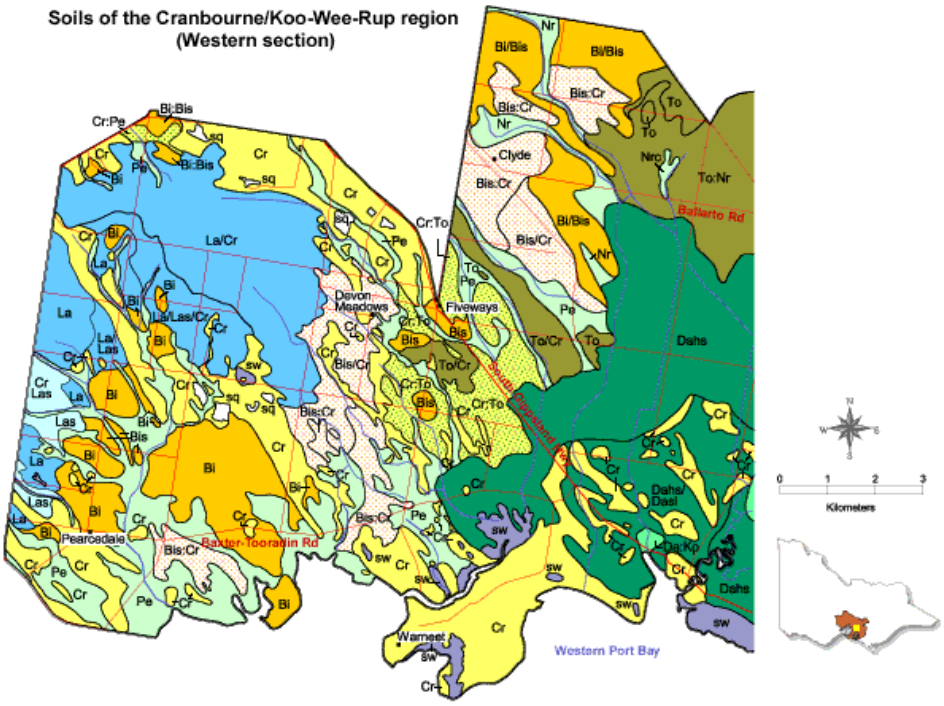
Sodicity is a measure of the exchangeable sodium in relation to other exchangeable cations in soil and is expressed as the Exchangeable Sodium Percentage (ESP). A soil with an ESP greater than 6% is generally regarded as being a sodic soil in Australia (Northcote and Skene, 1972). ESP >6% is considered the threshold where exchangeable sodium in soil, when in contact with fresh water, potentially adversely impacts soil structure and causes clay dispersion (VPA, 2019).

The presence of sodic soils within surface soils represent the following risks to the current and future use of the sites:

- reduction in plant/crop production due to poor permeability, poor root penetration;
- loss of soil structure; and
- increased erosion risk due to rainfall impact erosion and overland flow sheet erosion on flatter plans, as well as tunnel erosion in embankments and gully erosion in steeper areas.

Due to the low permeability and dispersive nature of sodic soils, these areas are also likely to be prone to surface ponding. Freshwater that comes into contact with excavations and exposed sodic/dispersive soils tends to be persistently turbid containing colloidal particles that are difficult (very slow) to settle out. This poses a risk of highly turbid/silt laden water discharge to local surface waters.

To assess the soil sodicity within the study area, a review of published soil mapping from Victorian Resources Online (VRO)[1], DELWP, and other published information (refer to Section 11 References) was conducted. Detailed soil mapping and description of land units for the Devon Meadows PSP area and surrounds is shown in Figure 5-3. This map when viewed in conjunction with the Lotsearch mapping (as well as SLR, 2021 report discussed below) can be extrapolated into the Casey Fields PSP to provide further indication of likely land systems and soil profiles.



Map Symbol	Unit Name	Geology	Landform
Bi	Bittern sandy loam	Tertiary sediments	Undulating rises
Bi:Bis	Bittern sandy loam and Bittern sand	Tertiary sediments	Undulating rises
Bi/Bis	Bittern sandy loam with Bittern sand	Tertiary sediments	Undulating rises
Bis	Bittern sand	Tertiary sediments	Undulating rises
Bis:Cr	Bittern sand and Cranbourne sand	Pleistocene aeolian and Tertiary sediments	Undulating rises/dunefield
Bis/Cr	Bittern sand with Cranbourne sand	Pleistocene aeolian and Tertiary sediments	Undulating rises/dunefield
sr	sandy rises	Recent alluvium and aeolian	Alluvial plain
Cr	Cranbourne sand	Pleistocene aeolian	Dunefield
Cr:Pe	Cranbourne sand and Pearcedale sandy clay loam	Pleistocene aeolian and Recent alluvium	Dunefield
Cr:To	Cranbourne sand and Toomuc sand	Pleistocene aeolian and Recent alluvium	Dunefield
Da	Dalmore clay	Recent lacustrine	Swamp
Da:Ko	Dalmore clay and Koo-Wee-Rup peaty clay	Recent lacustrine	Swamp
Ko	Koo-Wee-Rup peaty clay	Recent lacustrine	Swamp
Ko/sr	Koo-Wee-Rup peaty clay with sandy rises	Recent lacustrine	Swamp
Dahs	Dalmore clay (heavy surface)	Recent lacustrine	Swamp
Dahs/Dasl	Dalmore clay (heavy surface) with Dalmore clay (sandy loam surface)	Recent lacustrine	Swamp
Danp	Dalmore clay (non peaty)	Recent lacustrine	Swamp
Ga	Garfield sandy clay loam	Devonian granite	Rolling low hills
Ha	Hallam loam	Silurian sediments	Rolling low hills
La	Langwarrin loam	Silurian sediments	Rolling low hills
La/Cr	Langwarrin loam with Cranbourne sand	Silurian sediments and Pleistocene aeolian	Rolling low hills
La/Las	Langwarrin loam with Langwarrin sand	Silurian sediments	Rolling low hills
La/Las/Cr	Langwarrin loam with Langwarrin sand and Cranbourne sand	Silurian sediments and Pleistocene aeolian	Rolling low hills
Las	Langwarrin sand	Silurian sediments	Rolling low hills
Mn	Monomeith clay loam	Recent alluvium	Alluvial plain
Mn/sr	Monomeith clay loam with sandy rises	Recent alluvium	Alluvial plain
Nr	Narre clay loam	Recent alluvium	Alluvial plain
Nr/sr	Narre clay loam with sandy rises	Recent alluvium	Alluvial plain
Nrc	Narre clay	Recent alluvium	Alluvial plain
Pe	Pearcedale sandy clay loam	Recent alluvium	Alluvial plain
Ty	Tynong sandy clay loam	Recent alluvium	Alluvial valley
To	Toomuc sandy loam	Recent alluvium	Alluvial plain
To/Cr	Toomuc sandy loam with Cranbourne sand	Recent alluvium	Alluvial plain
To:Nr	Toomuc sandy loam and Narre clay loam	Recent alluvium	Alluvial plain
To/Nr	Toomuc sandy loam with Narre clay loam	Recent alluvium	Alluvial plain
sq	sand quarry		
sw	swamp	Recent lacustrine	Swamp

Figure 5-3 Map showing Soils of the Cranbourne – Koo Wee Rup Region – West (VRO, 2018)

In addition a review of the report: *Geotechnical, Sodic Soils, Hydrogeological, Contamination and Odour Review* of the Devon Meadows PSP (SLR, 2021) was undertaken. This report contains a detailed review of the presence and implications of sodic soils in the south and west of the study area. The findings of our investigations and assessments in the PSP are consistent with the SLR 2021 report.

The review indicated that the PSP area is expected to have a limited occurrence of sodic soils. The PSP study area appears to be south and north east of the Acidic Sodic Soil areas as shown in the mapping extract of major sodic soil classes from VRO (Figure 5-4 below).

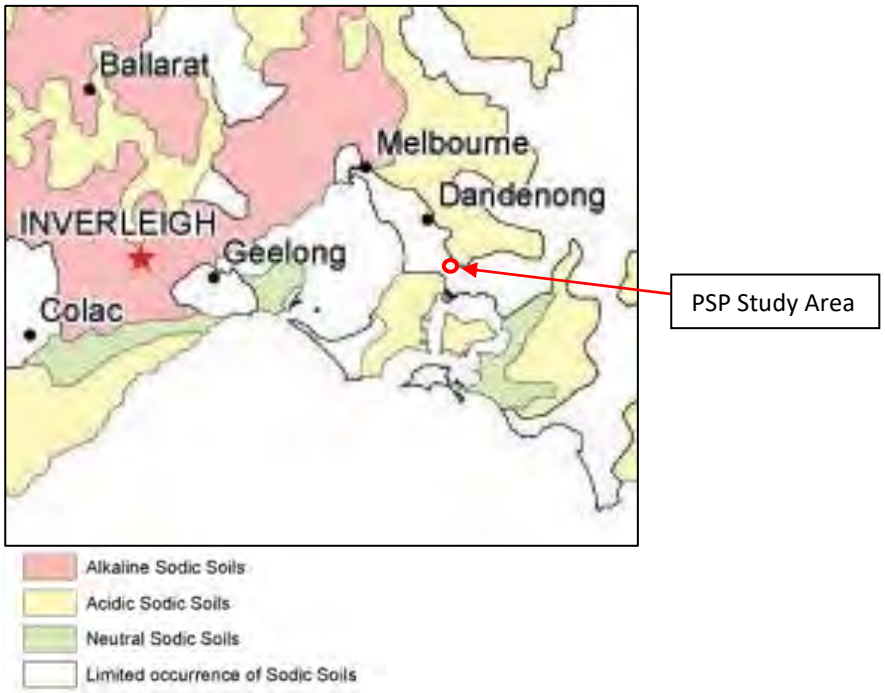


Figure 5-4 Map showing major sodic soil classes of Victoria (VRO). The red circle represents the approximate site location.

The VRO mapping, SLR report and Lotsearch report in combination indicate that most of the Casey Field South PSP's (ie. North and east of Gippsland Hwy) topsoils are Flinders clay, likely overlain with Pearcedale sands, Toomuc sandy loam, and Cranbourne sands along the east boundary of the PSP area. As described in Section 5.3, grey sodosols, which potentially have dispersive deeper subsoils, are likely present in the north and south-east portions of the Casey Fields South PSP (DELWP, 2022).

The majority of Devon Meadow PSP's (i.e. south and west of Gippsland Hwy) topsoils are non-sodic deep profile sands in the Alluvial Plains and Dunefields (see Figure 5-3). Pearcedale Sandy Clay loams are present within or on the fringe of low-lying drainage lines, which may have subsoils that behave like sodic soils (though these are expected to be isolated cases).

Sodic and dispersive soil profiles are widely distributed all across Victoria and the greater Melbourne urban growth area, but as indicated by published VRO mapping (Figure 5-4) are more prevalent in the northern suburbs and just to the south of the study area. Table 5-2 describes the typical soil profile (VRO, 2018) of soil types mapped within the PSP area. Given the limited scope of the site inspections and in-accessibility of the private lands across the PSP study area to validate soil types and conditions, the soil profiles with any clay in topsoil or subsoil should be assumed as having sodic/dispersion risk (precautionary approach).

Table 5-2 Soil types and descriptions of soils within the PSP area

PSP	Soil type	Typical soil profile (VRO)	Landform
Devon Meadows	Cranbourne sands	0 – 1.1m: sand 1.1 m continuing: sands and sandy clays at a variable depth	Dunefield
	Pearcedale sandy clay loam	0 – 4m: sandy clay loam 4 m continuing: medium to heavy clay	Alluvial plain
	Toomuc sandy loam	0 – 600mm: loam/sand	Alluvial plain

		600mm – 1.4m: light or medium clay becoming medium to heavy clay	
	Bittern Sands	0 – 700mm sandy loam to loamy sand 700mm – 1.4m: light or medium clay becoming medium to sandy clay	Undulating rises
Casey Fields South	Cranbourne sands	0 – 1.1m: sand 1.1 m continuing: sands and sandy clays at a variable depth	Dunefield
	Flinders clay	0 – 300mm: clay loams or sandy clay loams 300mm continuing: medium to heavy clays	Rolling low hills
	Pearcedale sandy clay loam	0 – 4m: sandy clay loam 4 m continuing: medium to heavy clay	Alluvial plain
	Toomuc sandy loam	0 – 600mm: loam/sand 600mm – 1.4m: light or medium clay becoming medium to heavy clay	Alluvial plain

The upper subsoils throughout the PSP are expected to be non-sodic, as shown in Figure 6, Appendix A. However, based on the desktop review findings, sodic soils may be present at depth throughout the PSP area. The Casey Fields South PSP has a large proportion of Flinders Clay in the lower alluvial plains area, which is expected to have a layer of sandy clay loam over medium/heavy clay at relatively shallow depth. These soils are less permeable and likely more sodic at depth than surrounding soil profiles in the study area. Therefore, this portion of the PSP area is more likely to present sodic/dispersive risk particularly within and fringing the urban drainage lines.

There is risk of soil erosion and sediment pollution if sodic soils (where present) are exposed, stockpiled and where water from sodic soil runoff, excavations or ponding on surface is allowed to drain offsite in an uncontrolled manner. Urban development and construction involving ground disturbance and vegetation removal, can expose sodic/dispersive soils to water and wind erosion. If underlying clays are exposed during works, these soils will requirement careful management to prevent sediment pollution loads in runoff and drainage to local drainage lines.

Erosion and sediment pollution risks are able to be routinely managed by the construction industry, and the best practice measures are well documented in industry and EPA guidance. Any soil profiles identified in the study area having clay in topsoil or subsoil should be assumed as having some sodic / dispersion risk that should be appropriately managed by the developer at time of making planning and development applications to Council. The developer should demonstrate management of construction sites in accord with Industry Sediment and Pollution control codes (eg. IECA Best Practice Erosion and Sediment Control Guidance, VPA's Engineering Design and Construction Manual for subdivision in Growth Areas – Addendum 19-01 Sodic and Dispersive Soils (currently in Draft)), and EPA Victoria Guidance including EPA Construction techniques for sediment pollution control (Pub 275) including development of Erosion and sediment control (ESC) Plans as part of CEMPs.

5.5 Acid Sulfate Soil - ASRIS Mapping

Australian Soil Resource Information System (ASRIS) mapping for Acid Sulfate Soils classes the PSP area and surrounds as Cq(p4) an "Extremely Low (1-5%)" probability of occurrence of acid sulfate soils (Figure 5-5).

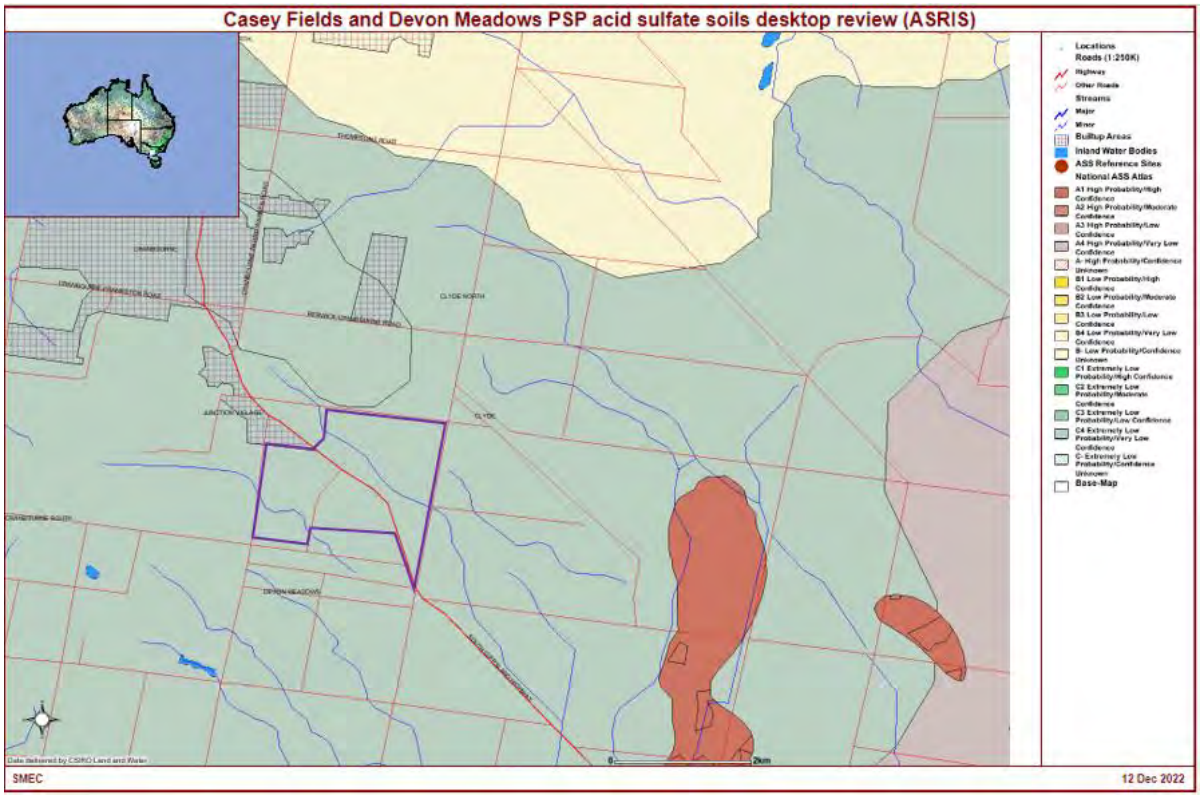


Figure 5-5 Acid Sulfate Soils map (ASRIS) showing the PSP within the wider regional context

5.6 Regional Hydrology

5.6.1 Surface Water

Within the precinct, there are a number of drainage lines or waterways that flow to the southeast toward Rutherford Creek.

During the site inspections, there were no notable surface water features observed. Aerial photographs show two water-filled quarries within the DM PSP area at 40W Craig Road, Devon Meadows and 55 Devon Road, Devon Meadows respectively. A map showing the location of these features is in Appendix A, Figure 8.

The catchment area covering the PSP receives approximately 750 mm – 850 mm of rainfall annually.

The Victorian Unearthed mapping for the PSP shows a number of scattered zones of Land Subject to Inundation overlay and Urban Floodway Zones (these areas are shown in Figure 5-6 below). The zones and overlays indicate flooding will need to be considered and addressed in developing the site.

The hydrologic characteristics are further described in Section 7.4.

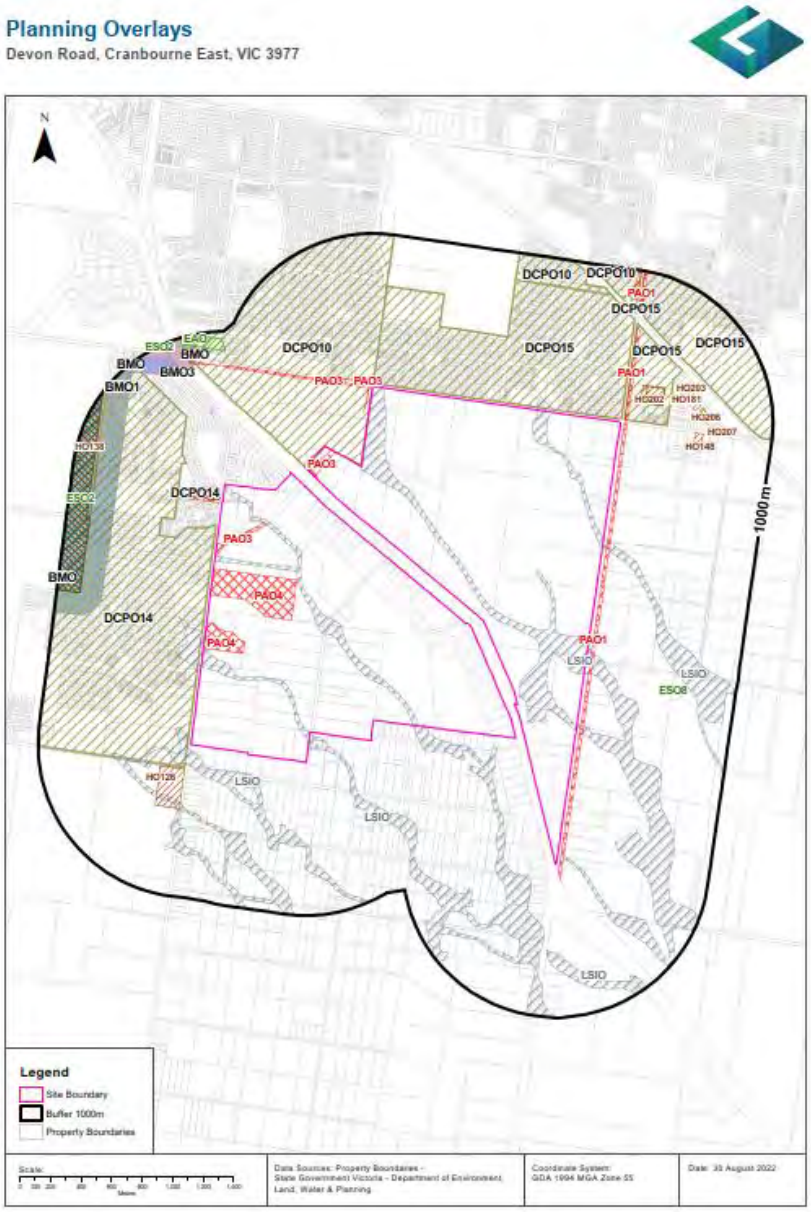


Figure 5-6 Land Subject to Inundation Overlays (LSIO) shown above

The City of Casey Planning Scheme Overlays (Land Management) indicates multiple urban drainage lines orientated northwest to southeast across the entire site that align with the Land Subject to Inundation Overlay (Figure 5-6). The project site borders Royal Cranbourne Botanic Gardens to the northwest that is subject to a Bushfire Management Overlay.

Further discussion of site topography is provided in Section 7.2.5.

5.7 Regional Geomorphology

The site is located north of Western Port Bay with a surface geology of sand dunes partially overlying Baxter sandstone.

5.8 Regional Hydrogeology

5.8.1 Overview of regional hydrogeology

A review of the regional hydrogeology of the area indicates that the main aquifers present include:

- Baxter Sandstone
- Older Volcanics

The Baxter Sandstone is the primary groundwater resource for the area with the Older Volcanics being less extensive. These aquifer systems are described in the Port Phillip and Westernport Groundwater Flow Systems as GFS10 and GFS7, respectively (Dahlhaus et al, 2004).

The Baxter Sandstone is included as part of the Brighton Group which forms an extensive aquifer across most of the southeastern Melbourne suburbs. The Brighton Group sediments (including the Baxter Formation towards Westernport area) form part of an extensive sand sheet that was deposited by a retreating sea during the Pliocene. The relatively thin veneer of gravels, sands, silts and clays layer is exposed in the southeastern Melbourne suburbs, the Mornington Peninsula and French Island. The aquifer permeability can be affected by being extensively ferruginised or silicified in some areas.

The Older Volcanics is a basalt and therefore potentially may weather into a clay which will affect its permeability. At depth, the basalt will be less weathered, and groundwater would be expected to be present in fracture systems.

Recharge to the Baxter Formation predominantly occurs via infiltration where outcrop or subcrops occur. Recharge to the Old Volcanics occurs where outcrop occurs or from cross-formation flow at depth.

Aquifer conditions for both the Baxter Formation and the Old Volcanics are unconfined to semi-confined.

Regional groundwater flow in the vicinity of the site is expected to be towards Western Port Bay which lies to the southeast.

5.8.2 Groundwater quality

VVG groundwater salinity mapping indicates the groundwater in the Casey Fields South and Devon Meadows PSP area ranges between 3,500-7,000 mg/L TDS over the majority of the PSP area, with a small portion of the PSP (along the north) ranging between 1,000 - 3,500 mg/L TDS.

The environmental value of groundwater is classed into segments, as defined in the Environment Reference Standard (Victorian Government, 2021). Based on the salinity data provided in the VGG, the environmental value of groundwater in the PSP is classed into Segment A2 (601 – 1,200 mg/L TDS) and Segment B (1,201 – 3,100 mg/L TDS).

The brackish nature of the groundwater in the PSP may require careful monitoring if dewatering or extraction is required, particularly for the consideration of the disposal of water. The aggressivity of groundwater cannot be assessed with available data; groundwater quality sampling is recommended to understand the potential for groundwater impact on below-ground infrastructure, if required.

5.8.3 Groundwater dependent ecosystems

The GDE Atlas (Bureau of Meteorology, 2022) identifies a number of Terrestrial GDE within the PSP (refer to Figure 5-7). The majority of the identified Terrestrial GDE are located in Devon Meadows, south of South Gippsland Highway and classified as ‘High Potential GDE’ or ‘Moderate Potential GDE’ from national assessment. No Aquatic GDE are recorded in the PSP. No subterranean GDE have been analysed in the PSP study area.

Terrestrial GDE are areas where terrestrial vegetation relies on the availability of shallow groundwater. The Terrestrial GDE may require careful monitoring if dewatering or extraction is required in the PSP.

Terrestrial Inflow dependent ecosystems (IDE) identifies vegetation ecosystems that are likely to use a water source in addition to rainfall, such as water stored in the unsaturated zone, surface water or groundwater. Figure 5-8 shows that the PSP has areas which are recognised as ‘Highly Likely’ to be IDE.

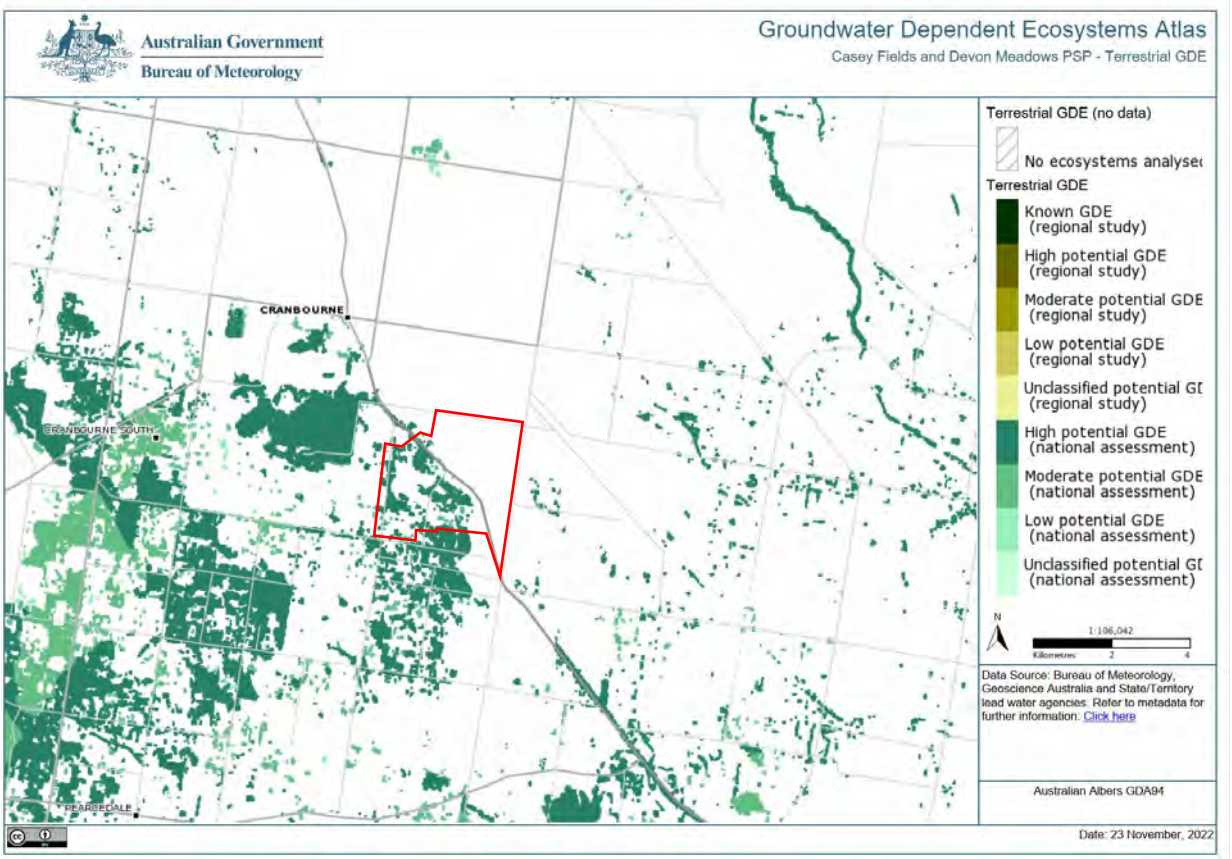


Figure 5-7 Terrestrial Groundwater Ecosystems (Bureau of Meteorology) – Regional map

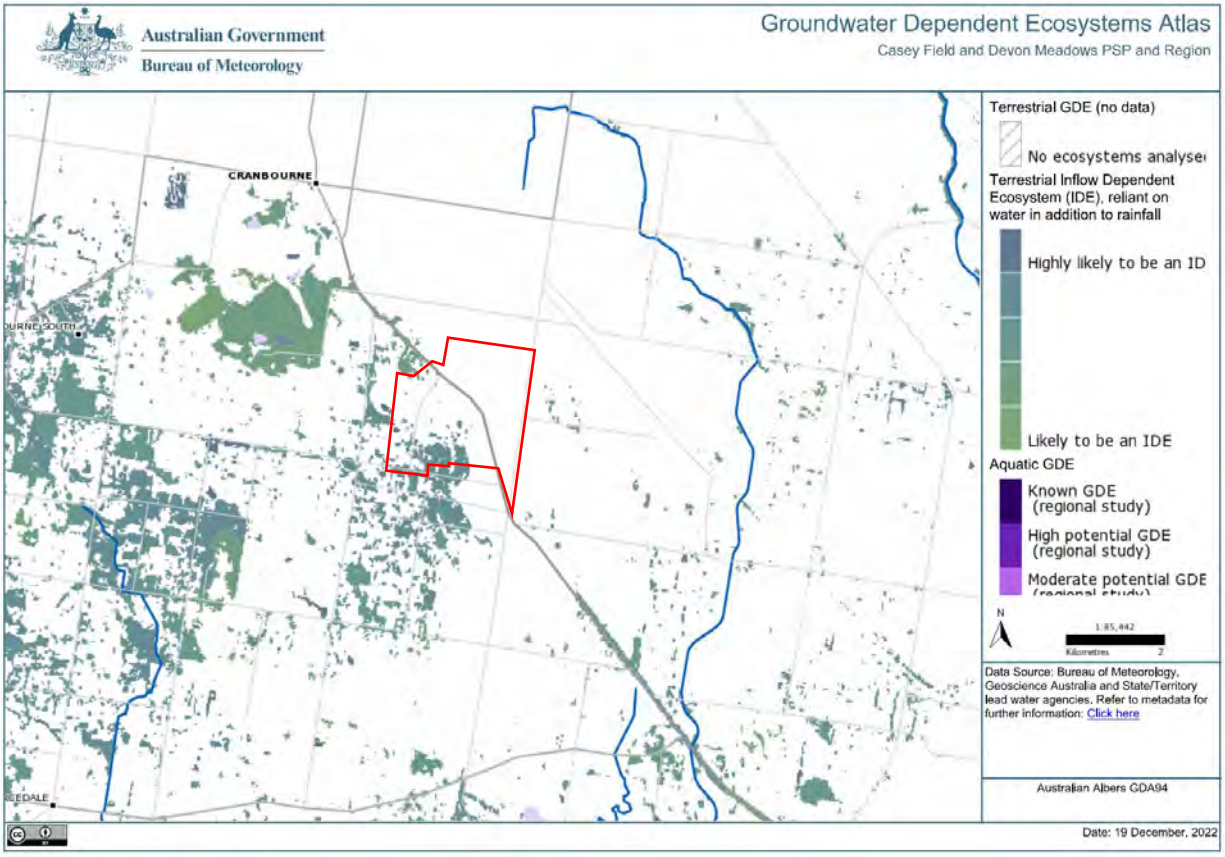


Figure 5-8 Likelihood of inflow-dependent ecosystems within the PSP area.

5.9 National Pollutant Inventory

A search of the National Pollutant Inventory (NPI) database (www.npi.gov.au) for the Casey Fields South and Devon Meadows PSP area showed there were no industrial premises that trigger the thresholds to report their annual emissions to NPI (Figure 5-9). The closest facility that reports its emissions to NPI is the Clyde Feedmill (red pin on Figure 5-9) which is located approximately 1.5km east of Clyde-Five Ways Road.

Figure 5-9 NPI database search for the Casey Fields South and Devon Meadows PSP area (black shaded area)

6 Information review

This section summarises the various sources of information, records and reports reviewed as part of the Stage 1 desktop assessment.

The desktop assessment of potential soil and/or groundwater contamination included a review of the following key information sources:

- City of Casey Records
- EPA Victoria Records
- Lotsearch® Records

6.1 City of Casey records

Table 6-1 Summary and significance interpretation of records received from the City of Casey

Information	Property Address and Description of Land Use	Significance
Summary of current PSP Land Uses	22 Properties - Rural residential, Turning Point Family Church and Lighthouse Christian College, BP petrol station, grazing, vegetable and flower market gardens.	When assessed against the Victorian Department of Environment, Land, Water and Planning, *Potential Contaminated Land, Planning Practice Note 30*, July 2021. The PSP contains a number of land uses which represent a potential contamination risk ranging from *High* to *Low* as listed below for each property.
Council contaminated land assessment register	• **1360 Ballarto Road** – potentially contaminated due to current and historic use as a market garden and flower farm, down gradient to a chicken broiler.	Medium potential for contamination
	• **1370 Ballarto Road** – potentially contaminated due to current and historic use as a market garden and flower farm, down gradient to a chicken broiler.	Medium potential for contamination
	• **1470 Ballarto Road** – former agricultural activities and market gardens, septic tank onsite, current concrete batching plant and landscape gardening and trade supplies.	Medium potential for contamination
	• **1490 Ballarto Road** – historic market gardens, currently a BP petrol station.	High potential for contamination
	• **255 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed.	Medium potential for contamination
	• **251 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Medium potential for contamination
	• **245 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Medium potential for contamination
	• **235 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Medium potential for contamination
	• **215 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Medium potential for contamination

Information	Property Address and Description of Land Use	Significance
Council contaminated land assessment register	• **165 Clyde-Five Ways Road** – potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed.	Medium potential for contamination
	• **1715 South Gippsland Highway** - potentially occurring agricultural activities (i.e. market gardening). Agricultural gazing, market gardens/agricultural cropping with farmhouse and large dam.	Medium potential for contamination
	• **35 Devon Road -** potentially contaminated due to previous use for extractive industries in the 80's and 90's. Machinery shed built on site in 1981. A tip is possibly located somewhere onsite.	High potential for contamination
	• **55 Devon Road -** Was previously part of parcel CA29 located to the west of this site used for extractive industries in the 80's and 90's. Permit granted for a machinery shed associated with the sand washing plant in 1981. A tip was possibly located somewhere on this site.	High potential for contamination
	• **40W Craig Road -** potentially contaminated due to previous sand extraction (Frank Vella Sands Supply Site) and processing since the 1970's. A Soil Contamination Assessment completed for the site identified areas requiring remediation.	High potential for contamination
	• **42 Craig Road -** potentially contaminated due to previous sand extraction (Frank Vella Sands Supply Site) and processing since the 1970's. A Soil Contamination Assessment completed for the site identified areas requiring remediation.	High potential for contamination
	• **48W Craig Road -** potentially contaminated due to previous sand extraction (Frank Vella Sands Supply Site) and processing since the 1970's. A Soil Contamination Assessment completed for the site identified areas requiring remediation.	High potential for contamination
	• **44-46 Craig Road -** potentially contaminated due to previous sand extraction (Frank Vella Sands Supply Site) and processing since the 1970's. A Soil Contamination Assessment completed for the site identified areas requiring remediation.	High potential for contamination
	• **60 Devon Road –** potentially contaminated due to operating a sand quarry since 1970. In 1978 they applied for second sand drying and treatment plant.	High potential for contamination
	• **100 Devon Road –** potentially contaminated due to operating a poultry farm since the 1970's.	Medium potential for contamination
	• **1930 South Gippsland Highway -** potentially contaminated due to the site was used to manufacture concrete products such as septic tanks and pits since 1971, permit granted in 1977.	Medium potential for contamination
	• **95 Devon Road -** Former poultry farm.	Medium potential for contamination
	• **1945 South Gippsland Highway –** potentially contaminated due to land use as a plant nursery. Planning permit submitted in 2019 to establish a green waste recycling and transfer station.	Medium potential for contamination
	• **2025 South Gippsland Highway –** potentially contaminated due to current petrol station and storage of fuel.	High potential for contamination
	• **1985 South Gippsland Highway -** In 1972 the site requested to manufacture pallets and store sawdust. May have used and stored chemicals to treat timber.	High potential for contamination

Information	Property Address and Description of Land Use	Significance
Council contaminated land assessment register	• **180 Clyde-Five Ways Road -** Site used as a market garden since the 1960's with a machinery shed built in 1978. Use of pesticides and herbicides and storage of fuels/solvents at the site for machinery.	Medium potential for contamination
	• **40 Bakers Road -** The site was permitted to operate as a wholesale nursery in 1980. Application of pesticides/herbicides may have occurred.	Medium potential for contamination
	• **65 Campbells Road -** 24-08-1973 - council does not object to an extension to the existing poultry farm. Lot 10, LP53114 Cnr Bakers and Campbell Roads.	Medium potential for contamination
	• **24 Bakers Road -** Permit granted to establish a machinery shed on the site in 1980.	Medium potential for contamination
	• **1760 Ballarto Road -** Permit granted in 1980 to establish a machinery shed.	Medium potential for contamination
	• **90 Clyde-Five Ways -** Road Machinery shed built in 1978, the site was used as a market garden.	Medium potential for contamination
	• **225 Manks Road -** Site is listed on the EPA Priority Sites Register as of 2020. Industrial waste has been dumped at the site. Requires assessment and/or clean up.	High potential for contamination. It is noted that this site is approximately 2.5 km outside the PSP area.
Other Council information	No landfill buffers within PSP. No Environmental audit overlays (EAO) within PSP. No Environmental significance overlays (ESO) within PSP.	N/A
Historical aerial images (council records)	• **1939** – the PSP was undeveloped paddocks with some tree vegetation in the northeast area and south east area of the PSP. South Gippsland Highway, Clyde-Five Ways Road were present. • **1960** – the PSP was generally unchanged, a house and sheds are present at 255 Clyde-Five Ways Road. • **1972** – Ballarto Road is now present to the north of the PSP. Most of the vegetation in the northeast has been removed. Properties at 1470 Ballarto Road and 165 Clyde-Five Ways Road are used for market gardens with dams. A small building and dam are present at 215 Clyde-Five Ways Road. A house and shed are present at 1805 South Gippsland Highway. Small sheds, areas of grass slashing and fences are present indicating the land is widely used for grazing. • **1985** – 285 and 275 Clyde-Five Ways Road are now both market gardens. Most properties have a rural residential house, sheds, and some properties have dams. • **1991** – the PSP is relatively unchanged. 1360 Ballarto Road has two large greenhouses and a dam. • **2000** – 1360 Ballarto Road built more greenhouses, 1370 Ballarto Road, 1470 Ballarto Road, 251 Clyde-Five Ways Road added commercial greenhouses. 1845 South Gippsland Highway have a large oval running track. • **2010** – 235 Clyde-Five Ways Road and 1805 South Gippsland Highway are residential properties with many small paddocks with animal shelters. The Turning Point Family Church is present at 1785 South Gippsland Highway, the land for the Christian College has been cleared. 1370 Ballarto Road extended their greenhouses. • **2020** – the greenhouses at 1370 Ballarto Road have been partially demolished. The Lighthouse Christian College is completed. 1470	N/A

Information	Property Address and Description of Land Use	Significance
	Ballarto Road appears to be a concrete batching plant. 235 Clyde-Five Ways Road is no longer covered in small paddocks and animal shelters.	
Councils description of potential sources of contaminated land	• *Septic tanks* • *Use and storage of fuel and chemicals associated with machinery sheds and agricultural practices* • *Use of pesticide and herbicide on market gardens* • *Use of pesticides around rural residential properties for pest control* • *Backfilling of former dams* • *Unregulated landfills or buried farm waste*	Land uses range from *High to Low* potential for contamination.

Source: City of Casey

6.2 Historical review of aerial photographs

The Lotsearch® Report (Lotsearch® Report Reference: LS035757 EL), divided the site into five sections. The five areas are shown in Figure 2 (Appendix A).

A review of historical aerial images included within the Lotsearch® report was undertaken, with a summary of each photograph and any change in landscape summarised in Table 6-2 below.

Table 6–2: Summary of Aerial Photographs

Date of Aerial Photograph	Description of the PSP	
	Section 1	Section 2
1939	Scattered farmland and properties around the edges of the PSP area. Dense vegetation covering most of the area. South Gippsland Hwy, Craig Road, Ballarto and Devon Road visible.	Mostly cleared land with scattered housing along Clyde-Five Ways Road. Dense vegetation within the South and East edges. Ballarto Road, South Gippsland Hwy and Clyde-Five Ways Road visible.
1956	Increased housing and development of the land. Potential Quarry visible.	Increased housing, potential agricultural buildings and development of land for agricultural means along Clyde-Five Ways Road. Still mostly cleared land.
1960	Increased development of land into housing and potential agricultural land. Devon Road now connecting Ballarto Road and Browns Road. Another potential Quarry visible.	Increased development of land along South-Gippsland Hwy and Clyde-Five Ways Road. Still mostly cleared land.
1962	Increased development of land, increased housing.	Increased development of land along Clyde-Five Ways Road. More agricultural land and farm dams.
1968	Increased development of land, increased housing. New circular paths visible in the East and South. Potential quarries changing in size.	Major development of land west cleared with circular Road development and agricultural land. Existing agricultural land along Clyde-Five Ways Road expanded.
1974	Increased agricultural land. Large building in - potential quarry on the East side. Car yard along South Gippsland Hwy.	Increased agricultural land and farm dams along Clyde-Five Ways Road. Additional housing along South-Gippsland hwy.
1979	Increased agricultural land. Water bodies present in potential quarry along the east. Oval shaped paths extended. Increased housing.	Additional housing, land clearing and agricultural land.
1981	Potential quarry along west expanded. Additional large building at potential quarry along east.	Increased agricultural land and landscaping.
1985	Potential Quarries increase size, new potential quarry joined to previous two. Increased land clearing and agricultural land.	Increased agricultural land, land clearing and a few additional houses.

Date of Aerial Photograph	Description of the PSP	
	Section 1	Section 2
1989	Additional large building in potential quarry on the East side. Water body in newest potential quarry location. Agricultural land in North Section. White sheds on some agricultural land.	Circular path visible along Clyde-Five Ways Road, minor change in landscaped trees and agricultural land.
1991	Additional housing and expansion of existing agricultural locations. Additional water bodies at potential quarry sites.	Some construction development at Southern tip of Section.
2009	Expansion of potential quarry site in the west. Additional land clearing and agricultural land. Increased white sheds amongst existing agricultural land. Expansion of agricultural land in North. Large building with carpark built next to car yard.	Truck stop, potential petrol station at Southern tip. Upgrades to existing buildings to larger sizes. Large white construction at North-West corner. Uniform Small white squares on agricultural land in East. Additional housing, and new oval shaped path visible. Numerous white Sheds appearing on existing agricultural lands.
2014	Closure of west potential quarry returned to cleared land. Increased expansion of agricultural land in North.	Location with large number of trucks visible in South. Additional housing, and agricultural areas. White sheds on agricultural lands increase in numbers.
2022	Rectangle containers present in former west quarry, and green coverage on water body. Buildings present in newest potential quarry. Several buildings in North with an Oval and carpark indicating potential School. Oval shaped paths overgrown with vegetation along East. Looped track present in cleared land on West.	Shop (maybe petrol station) in North-East corner. White squares gone; agricultural land returned to cleared land.

6.3 EPA Victoria records

A review of the EPA Victoria contaminated land mapping tool (Victoria Unearthed) for the area of the PSP and buffer zone, along with the Lotsearch® Report and several potential soil and water contamination locations were revealed. These locations are summarised in Table 6–3: Summary of locations of potential soil or groundwater contamination below.

Table 6–3: Summary of locations of potential soil or groundwater contamination

Site Address	Description	Information Source	Significance/Findings
Lot 2 Devon Road (within PSP) 1780 South Gippsland Highway, Devon Meadows, as defined by Lot 2 on Plan of Subdivision 433426Y, Parish of Sherwood	A 53x certificate audit (Audit 58675-1) was undertaken for the area on 29 November 2005.	EPA Victoria Unearthed	At the time of the audit the auditor concluded that soil contamination at the site has not occurred that would impact upon any beneficial use that may be made of the site, and that the risk of groundwater contamination is low, the auditor concluded that it is appropriate to issue a Certificate of Environmental Audit for this site. That the site is suitable for the following range of land uses: • Maintenance of Ecosystems; • Parks and reserves; • Agriculture; • Recreation / open space; • Sensitive use – high density; • Sensitive use – other; • Commercial; and • Industrial.
1591 South Gippsland Highway (877m North West of PSP)	A 53x statement (74974-1) undertaken on 16 November 2018.	EPA Victoria Unearthed	The audit concluded on the basis that some beneficial uses of land and groundwater are precluded, the Auditor is unable to issue a Certificate of Environmental Audit for the site in its current condition, the reasons for which are presented in the environmental audit report. Accordingly, the Auditor has reviewed the environmental assessment data for the subject site and formed an opinion that the site is conditionally suitable for the proposed low-density residential development. A Statement of Environmental Audit has therefore been issued to that effect. The site is suitable for the beneficial uses associated with: • Sensitive use (other); • Sensitive use (high-density residential); • Recreation / open space; • Commercial; and • Industrial. Subject to the following conditions
1591 South Gippsland Highway (877m North West of PSP)	EPA Groundwater restriction zone, restricting use of drinking water, irrigation of crops, recreational water usage and livestock water supply. (74974-1)	Lotsearch®	
Eastern Treatment Plan Dual Pipe Scheme (849m North East of PSP)	Subject to Audit recommendations	Lotsearch®	Report not sighted
Forest area within State Dandenong Forest Management Area (891m West of PSP)	Subject to Audit recommendations	Lotsearch®	Report not sighted

6.4 Australian Heritage Databases

6.4.1 Historical Title Search

Certificates of title were reviewed to discern information on the current and historical land uses within the CFS and DM PSP area (Appendix E Lotsearch report LS035757).

A review of the titles showed that the PSP has had mixed uses over its history, including:

- sand extraction (quarries) along Devon Road (35 – 60) and Craig Road (40W-48W).
- market gardens and flower nurseries,
- poultry farms,
- other agricultural farms, and
- rural residences.

There has been an active motor garage and service station at 2025 South Gippsland Highway, Clyde (on the corner Clyde-Five Ways Road and South Gippsland Highway) and currently trading as “7-Eleven Five Ways". Sites associated with “mining and extractive industries” are summarised in Section 7.2.6.

Current title documents suggest the CFS and DM PSP area is still used for sand extraction (quarries), market gardens, flower nurseries, poultry farms, other agricultural farms, and rural residences. Current titles are shown in Figure 5 (Appendix A).

6.4.2 Cultural Heritage

Lotsearch reported 45 sites of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Victorian Aboriginal Heritage Regulations 2018, within the dataset buffer. Site 23600 overlays most of the Devon Meadows PSP and overlays with land dune deposits (Qd1). Six other sites are with the PSP, and the others sit outside the PSP but within the 1,000m buffer of the dataset. These sites are 28438, 29201, 29552, 29290, 30215 and 30639. All sites identified by Lotsearch are shown in Figure 6-1 below.

Figure 6-1: Areas of cultural heritage sensitivity in and surrounding the PSP area.

7 Site characterisation

7.1 Site contamination assessment

The desktop study (Stage 1 assessment) was inconclusive and based on the findings of the desktop assessment the following properties listed in Appendix C recommended as the target of the site inspection.

A drive-over inspection of the Casey Fields South/Devon Meadows study area and surrounds was conducted by SMEC on 23 and 28 November 2022 between 8am and 5pm.

The fieldwork was conducted with consideration of the following EPA guidance and Environmental Reference standards:

- EPA Publication 1881 Guidance to field odour surveillance
- EPA Publication 1883 Guidance for Assessing odour (June 2022)
- EPA Publication 1961 Guideline for Assessing and Minimising Air Pollution in Victoria (Feb 2022)
- EPA Publication 1826.4 Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues
- EPA Publication 1518 Recommended separation distances for industrial residual air emissions
- Victorian Government Gazette Environmental reference standard.

7.1.1 Visual inspections

SMEC conducted a drive-over tour on public roads through the CFS and DM PSP and undertook closer inspections on foot using public road reserves and public open spaces. Access to private properties was only undertaken by SMEC field staff with permission of owners/occupiers of properties.

Fifty-three sites within the CFS and DM PSP were assessed for odour, fume, gas/fuel/rubber smells, smoke, dust, steam, noise, vibration and other potential aesthetic impacts (e.g. litter). The weather conditions were also recorded. These observations and photos of the properties are summarised in Appendix C. Properties of interest were examined from roadways and publicly accessible areas.

7.1.1.1 Agricultural land use

A significant portion of the land within and surrounding the CFS and DM PSP has been used for agricultural purposes, such as crops and grazing, for an extensive period. These agricultural activities have the potential to cause land contamination from metals, pesticides, herbicides, fungicides, nutrients, and biological contaminants.

Septic tanks can be fairly common on agricultural sites, however, it is difficult to identify underground tanks during a visual inspection. Leakages from these septic tank systems can release biological contaminants (pathogens) and nutrients.

General agricultural use and septic tank usage are considered to pose a ‘low’ to ‘medium’ contamination potential to a site and surrounding land. Contamination risk ratings for properties inspected within and surrounding the CFS and DM PSP are presented in Appendix D.

7.1.1.2 Farm residences and associated buildings

Farm residences and associated buildings were observed at numerous sites within and surrounding the CFS and DM PSP area. These buildings were found to house operational and non-operational farm machinery, materials, vehicles, oils and lubricants for machinery maintenance, and agricultural chemicals such as herbicides, fungicides, chlorine, and pest bait. The most likely sources of contamination from these items are spillages of oils, lubricants, and agricultural chemicals onto the soil.

Several old, degraded farmhouses and sheds observed during the site inspections are considered potentially asbestos-containing. While undisturbed, asbestos poses a low risk to human health and the environment. During demolition works, sanding, and abrasion of asbestos-containing materials, the fibres can become suspended in the air.

7.1.1.3 Imported fill, fly-tipped waste and stockpiled material

Without undertaking intrusive investigations of the sites within and surrounding the CFS and DM PSP, it can be difficult to identify the presence of imported fill. Fill material is most commonly found in areas where construction and development works have been undertaken.

Surface waste suspected of being illegally dumped, as well as stockpiled material, was observed on several sites.

A map of the contamination potential of investigated sites is in Figure 3, Appendix A. Descriptions and further recommendations for site investigations are presented in Appendix D.

7.2 Geotechnical assessment

7.2.1 Regional Geology

With reference to the Geological Survey of Victoria's Cranbourne 1967 1:63,360 map sheet, shallow natural materials across the project site is expected to primarily consist of Quaternary siliceous sand dunes and sheets (Q2) in Section 1 South and Section 2 South West and Tertiary Baxter Sandstone (Tb) in Section 1 North, Section 2 North and Section 2 South East.

Silurian Sandstone (S) is expected to underly Q2 materials and surface towards the southwest side of Section 1 South. Quaternary Peaty Clays (Q5) may be encountered near-surface surrounding water courses that stretch north-west to south-east through Section 1 North, Section 2 North and Section 2 South East. Some Tertiary Older Volcanics (Tob) may be encountered on the north edge of Section 1 North.

Online interactive map resource GeoVic generally agrees with the Geological Survey of Victoria's Cranbourne map sheet showing inland dune deposits toward the south west of site and Red Bluff Sandstone (which includes Baxter Sandstone) on the north east side of site.

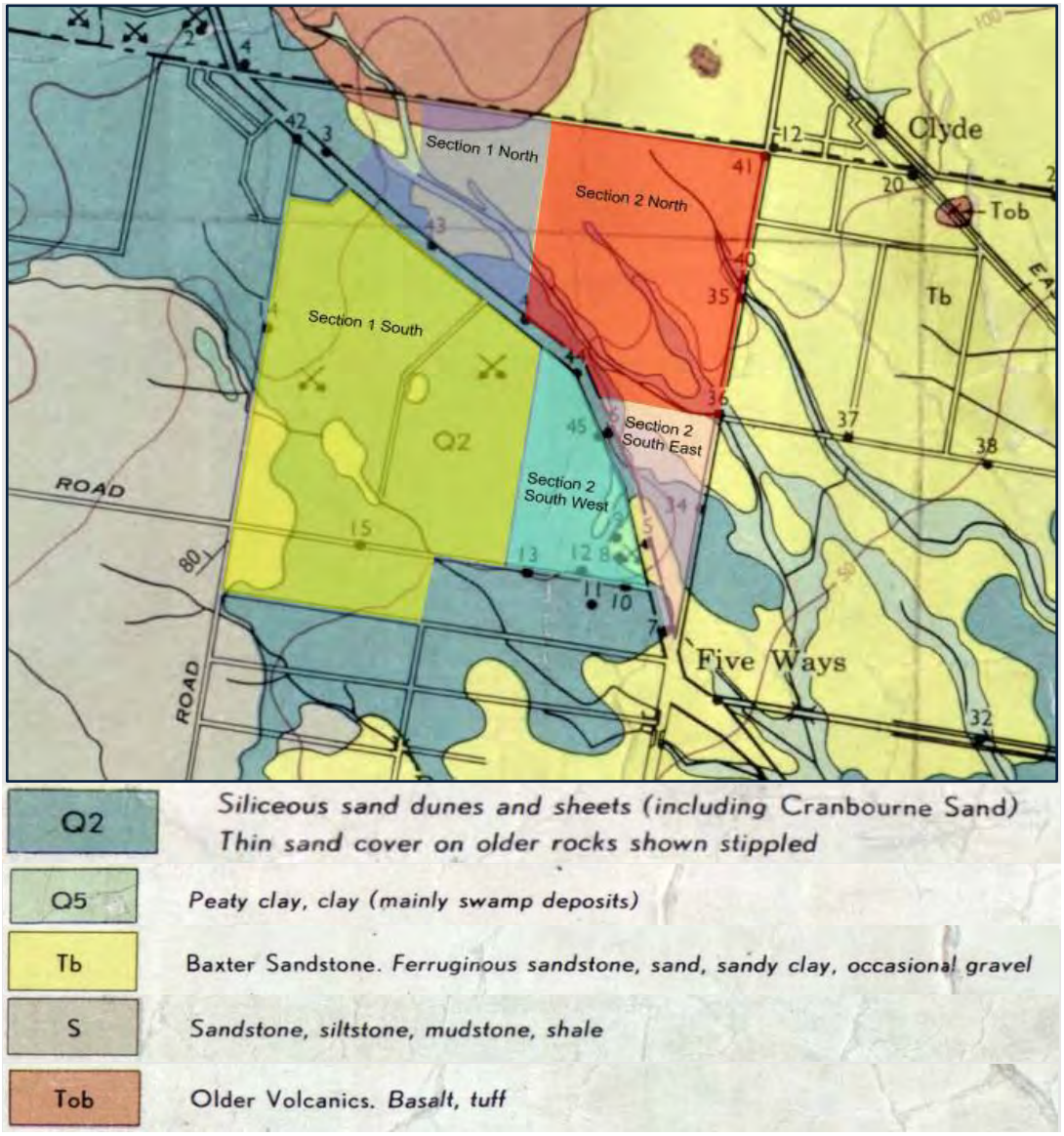


Figure 7-1: Extract of Geological Survey of Victoria, 1:63,360 Cranbourne map sheet, with approximate Section extents (not to scale)

7.2.2 Anticipated Characteristics of Subsurface Materials

7.2.2.1 Quaternary Deposits (Q2/Q5)

With reference to Victorian Resources Online, Port Phillip and Westernport Geology of the Region, the siliceous sand dunes and sheets (Q2) mainly consist of Cranbourne sand which can include cemented sands at a depth of about 1 m below the surface. Moderate to high permeability is expected for the sandy material, however, the cemented sand layer can impede the downward movement of water.

Peaty clay (Q5) is expected to underlie watercourses in isolated zones across the north-east of the site and is likely to comprise highly compressive, soft to firm material.

7.2.2.2 Baxter Sandstone (Tb)

Baxter Sandstone (Tb), more recently described as Baxter Formation by Thompson (Mines Dept Victoria, Geological Survey of Victoria, 'The geology and hydrogeology of the Western Port sunklands', 1974), generally comprises fine-grained clayey sands and sandy clays with lenses of coarser sand and fine gravels. This material overlies Older Volcanics (Tob), grading into thin layers towards the north of the site where Older Volcanics surfaces.

7.2.2.3 Silurian Sandstone (S)

The Silurian Sandstone (S) consists of very deep (>500 m) claystone and clayey siltstone with minor beds of fine clayey sandstone. This rock underlies all other material on site and is probable to be of high to very high strength.

7.2.2.4 Older Volcanics (Tob)

Older Volcanics (Tob) material primarily comprises variably weathered basalt with large vesicles overlain by residual basaltic clays of high plasticity. The basalts are exposed at the surface as relatively isolated caps in and surrounding the site locality. Older Volcanics is expected to be encountered as thin intrusions below the Baxter Formation and above the Silurian Sandstone.

7.2.3 Publicly Accessible Boreholes

Some information on subsurface lithology is provided on Visualising Victoria's Groundwater (VVG) interactive website from previous boreholes completed on site. Results from these boreholes generally indicate a depth of 5-15 m from the ground surface to the top of basalt or sandstone rock, with overlying clays and sand.

7.2.4 Seismicity

AS1170.4 Figure 3.2 shows a Hazard Factor (Z) of 0.09 for the site area. Geotechnical investigations shall be completed before site sub-soil class can be assessed, however, based on desktop assessment and with reference to AS1170.4 Section 4.2, it is expected that a Class C_e – Shallow Soil Site, or Class D_e – Deep or soft soil site would be appropriate for the expected geology.

With reference to online earthquake database maintained by Geosciences Australia, the nearest earthquake epicentre recorded within the last 100 years was approximately 3 km to the north of site in Cranbourne East. The earthquake event occurred on 28th January, 1987 and had a magnitude of 1.1. 36 earthquakes were recorded within 20 km of site in the last 100 years, ranging in magnitude from 0.6 to 3.3.

7.2.5 Topography

Topographical maps provided by VicPlan interactive online website shows the surface slope grades down from the north-west corner of site to the south-east corner, with an approximate difference of 20 m between maximum and minimum elevations. Maximum gradient of slope is in the order of about 1V:50H across site, based on Google Earth Imagery. The surface is generally flat, with some localised peaks and depressions across site. The South Gippsland Highway forms the boundary between northern and southern sections of site and is typically at grade.

7.2.6 Historic Mine Use

Section 1 South in Cranbourne and Devon Meadows has historically been used for open cut sand quarries at locations that are now used as the Royal Botanic Gardens, Cranbourne and by Cartage Australia for the supply and transportation of quarry material. This type of mine use supports the evidence that quaternary sands are expected in the south-west section of site and has resulted in localised areas of surface depression and large ponding for current land use.

No records of shaft, other underground works or depth of sand quarries within the site have been identified.

Table 7–1 Summary of former and current quarry and extractive processing sites

Business name and site location	Status of site and excavation
Cartage Australia 35 Devon Road, Devon Meadows	Site has been backfilled and the nature of the fill material is unknown.
Metro Industrial Sands 40 Devon Road, Devon Meadows	Site has been backfilled and the nature of the fill material is unknown
Independent Sands, 55 Devon Road, Devon Meadows	The Site appears to be an operating site. It has has a water-filled quarry.

Business name and site location	Status of site and excavation
Metro Industrial Sands and TGS Industrial Sands 60 Devon Road, Devon Meadows	Site has been backfilled and the nature of the fill material is unknown.
40W Craig Road, Devon Meadows	Site has been backfilled and the nature of the fill material is unknown. Site is vacant. The Site has a water-filled quarry. Recent aerials show a large algal bloom in the quarry.
42 -48 Craig Road, Devon Meadows	Site has been backfilled and the nature of the fill material is unknown. Recent aerial photos show the site to be used for storage containers. It looks to be a laydown area.
Owned by Melbourne Water Corporation 48W Craig Road, Devon Meadows	A portion of the site has been backfilled and the nature of the fill material is unknown. Potentially contaminated due to previous sand extraction (Frank Vella Sands Supply Site) and processing since the 1970's.

7.3 Hydrogeological assessment

The main aquifer in the PSP is the Baxter Sandstone which may be relatively permeable where coarse grained in nature and weathered; however, areas where clay content is high or it is ferruginised or silicified may reduce its permeability.

Visualising Victoria Groundwater (VVG) mapping indicates depth to groundwater across majority of the PSP is <5m, with portions of depth between 5-10m concentrated in the South of the PSP and areas of 10-20m depth in Section 2 North.

Groundwater flow directions are expected to follow topographic gradients which generally slope down from the north-west corner of site to the south-east corner of the site.

As indicated in Section 5.8.3, Terrestrial GDE have been identified within the PSP. No Aquatic GDE are recorded in the PSP. No subterranean GDE have been analysed in the PSP study area.

As indicated in Section 5.8.2, groundwater quality is likely brackish for most of the PSP.

Site-specific bores are shown on the Water Measurement Information System (www. https://data.water.vic.gov.au/). These are largely stock and domestic bores few licensed extraction bores.

7.4 Hydrological assessment

The general topography of the site drains from north west to south east direction. The catchments are predominantly farming zone and low-density residentials with low impervious areas producing runoff, except for areas towards the north and west where it consist of new and established residential developments.

The drainage lines are generally undefined and can be described as overland flow paths traversing roads, farmland and private low-density properties. Beginning from north to south, there are four catchments which discharge into the following drains;

- Casey Fields South Drain
- Wylies Drain Branch B
- Wylies Drain Branch F
- Wylies Drain Main Branch

The various waterways stretch approximately 1 to 2 km from the north western boundary of the study boundary to the south eastern boundary of the PSP. The waterway slopes varies approximately 0.7% to 0.9% across the catchments.

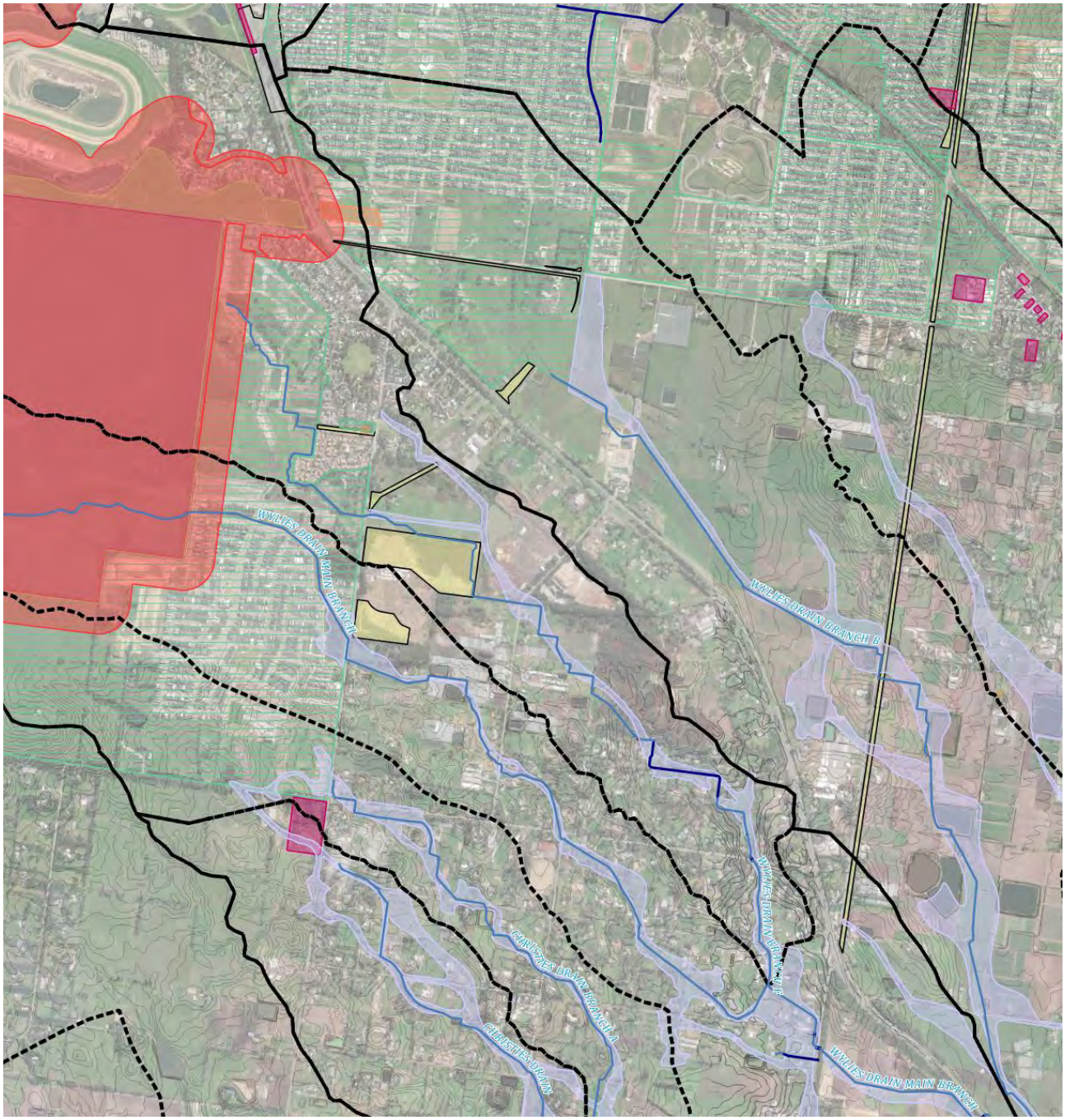


Figure 7-2 Surface water catchments (Created by SMEC)

The Planning Scheme Zone shows flood-related overlays across the site including Land Subject to Inundation overlay (LSIO) and Urban Floodway Zones (UFZ). These areas are shown in Figure 7-2 above. The zones and overlays indicate flooding will need to be considered and addressed in developing the site. There is limited surface flow data available in the area to be able to provide a good estimate of flooding in the 1 in 100 AEP event. SMEC is not aware of any flood modelling completed for the catchment. Based on the site topography, it is likely that breakaway flooding could be a feature in some of the sections of the drains during a large flood event.

Wylies Drain Main Drain and Branch F, captures a large undeveloped catchment upstream. In the more frequent rain events, low flows are expected in the main channels. A number of private dams and offline storages are evident across the drainage lines presumably being used for farming purposes.

7.5 Existing land uses with potential adverse amenity impacts

Adverse amenity can be described as locations which have the potential to negatively impact an area through environmental disruption via excess noise, negative visual impact, or degradation of air quality, among several others. For the purposes of this desktop investigation solely the impacts of adverse noise, visuals and air quality have been considered.

A review of the Lotsearch© report data and Google Earth visuals of the PSP and 1km boundary was conducted resulting in several points of interest. The property addresses and points of interest are summarised in Appendix B. The shortlisted properties summarised in Appendix B was used as a guide for the site inspections undertaken on 23 and 28 November 2022. The observations from the site inspections are discussed in Section 7.1.1 of this report and detailed in Appendix C.

7.5.1 Separation Distances

The land uses identified at the locations of interest were also assessed against Clause 53.10 *Uses and Activities with Potential Adverse Impacts* of the Casey Planning Scheme (Clause 53.10), EPA Publication 1518 *Recommendation Separation Distances for Industrial Residual Air Emissions* (EPA Publication 1518) and draft EPA Publication 1949 *Separation Distance Guideline* (EPA Publication 1949) which was recently released for public consultation on 7 December 2022. We note, it is proposed that EPA Publication 1949 replace EPA Publication 1518 once finalised.

Clause 53.10 of the Casey Planning Scheme identifies *types of uses and activities, which if not appropriately designed and located, may cause offence or unacceptable risk to the neighbourhood*. This clause identifies threshold distances to sensitive land uses such as residential zones, childcare, hospitals and education facilities. Where the threshold distance is not met, or none is specified, the application for permit must be referred to the EPA under section 55 of the Planning and Environment Act 1987. The EPA will then assess the application for permit against its guidelines.

EPA Publication 1518 provides advice on recommended separation distances between industrial land uses that emit odour or dust and sensitive land uses. A sensitive land use is defined in this guideline as *"Any land uses which require a particular focus on protecting the beneficial uses of the air environment relating to human health and wellbeing, local amenity and aesthetic enjoyment, for example residential premises, childcare centres, pre-schools, primary schools, education centres or informal outdoor recreation sites."* This guideline has a table that contains a list of recommended minimum separation distances for various types of industries.

Draft EPA Publication 1949 was recently released for public consultation on 7 December 2022. We have included this draft in our assessment of separation distances however it could be subject to further amendment before it is finalised in 2023. We understand that once finalised, this publication is likely to replace EPA Publication 1518 and will be referenced in the Victorian Planning Provisions.

The land uses within the PSP areas which are likely to require a threshold distance or separation distance are shown in Table 7-2 below. Refer also to Appendix A Figure 4 showing the separation distances.

Table 7-2: Land uses within the PSP with threshold or separation distances

Business	Type of Industry	Clause 53.10	EPA Publication 1518	Draft EPA Publication 1949
Aurora Construction Materials 1470 Ballarto Road	Appears to have concrete batching at the rear of the site	300m Concrete batching plant with a production rate exceeding 5000 tonnes per year	100m	No change proposed
Clear view commercial glass 1925 South Gippsland Highway	Manufacturing of glass products	500m	500m	No change proposed
LJ Kitchen 90 Clyde-Five Ways Road	Joinery	100m	n/a	n/a
South Gippsland Eggs 100 Devon Road	Egg Farm	n/a	Refer to Environmental Guidelines for the Australian Egg Industry, Australian Egg Corporation Limited, 2008	Egg Industry Environmental Guidelines – Edition II (2018)
D'Alberto Egg Farm 135 Devon Road	Egg Farm	n/a	Refer to Environmental Guidelines for the Australian Egg Industry, Australian Egg Corporation Limited, 2008	Egg Industry Environmental Guidelines – Edition II (2018)
Growing chickens Campbells Road	Free range poultry farm	n/a Clause 53.09 of Casey Planning Scheme	Refer to Practice Note 63, Department of Planning and Community Development, 2012	Planning and environment guideline for establishing meat chicken farms (Guide 1 – Assessment guide) (2021) Use EPA publication 1883 to assess special classes and farm cluster

Farming

There are a number of farms within the Devon Meadows and Casey Fields PSP areas. A new industry has been introduced in EPA Publication 1949 which is aimed to account for the use of compost, manures, biosolids etc at market gardens or farms with a proposed separation distance of 500m. We note should this industry be introduced

into EPA Publication 1949 when finalised, a 500m separation distance is likely to be recommended for any farms within the PSP areas using compost, manures or biosolids.

7.5.1.1 Environmental Guidelines for the Australian Egg Industry

The Environmental Guidelines for the Australian Egg Industry were prepared by FSA consulting in 2008. This guideline details the development, design and management options to assist the egg industry with planning and environmental sustainability issues. The sectors of the industry covered by the guidelines include hatcheries, pullet rearing facilities, egg production facilities (cage, free range and barn), grading floors and egg product manufacturing.

Section 4.4 of the Environmental Guidelines for the Australia Egg Industry outlines the recommended separation distances from egg facilities. It states:

In lieu of any specified by state and local government departments and agencies separation distance requirements, the following recommended separation distances are suggested:

- *Provide at least 500 metres between the impact source and any land use zone that is not compatible with the development (e.g. residential, rural residential).*
- *Provide at least 250 metres separation distance between the impact source and any sensitive land use (neighbouring house) that is located on land that is compatible with the development (e.g on land designated rural, farming or similar). Where a lot is identified as having potential for an 'as of right' dwelling the separation distance should be calculated to the centre line of the vacant lot.*
- *Provide at least 100 metres separation distance between the impact source and the property boundary where the adjoining boundary is land that is compatible with the development (e.g. rural, farming or similar);*
- *Provide at least 100 metres separation distance between the impact source and a public road that carries more than 50 vehicles per day that are not associated with the development.*
- *Provide at least 50 metres separation distance between the impact source and a public road that carries less than 50 vehicles per day not associated with the development.*

7.5.2 Clause 53.09 Poultry Farm

The purpose of Clause 53.09 is to *facilitate the establishment and expansion of poultry farms, including broiler farms, in a manner that is consistent with orderly and proper planning and the protection of the environment.*

This Clause includes a table with minimum setbacks from sensitive uses. See Figure 7-3 below.

Table 1 Minimum setbacks

Chicken numbers	Minimum distance to a building used for a sensitive use (accommodation, child care centre, education centre and hospital)	Minimum distance to land in a residential zone
1,000 chickens or less	50 metres	200 metres
More than 1,000 chickens	100 metres	400 metres

Figure 7-3: Minimum Setback from Clause 53.09 of Casey Planning Scheme

Any planning for future uses within the Devon Meadows and Casey Fields PSP areas should have regard to these minimum setbacks from poultry farms.

7.5.3 Existing noise environment

During the site inspections, field staff recorded observations about noise levels. The observations recorded were subjective, not quantitative. These observations are summarised in Appendix C.

In summary, the South Gippsland Highway and main roads were reported to have moderate to loud traffic noise. Commercial enterprises along Devon Road were reported to have low to moderate noise levels associated with machinery, vehicles and processes at these sites.

- Loud to moderate traffic noise was reported along South Gippsland Highway at twelve sites inspected along the highway at various times of day between 8:00 – 5:00pm and on different days.
- Moderate traffic noise was reported along Clyde-Five Ways Road in Clyde at eight sites inspected along the road. Noise levels varied with traffic volumes at different times of the day.
- Low to moderate noise associated with machinery, vehicles and processes at these sites was reported at commercial sites along Devon Road in Devon Meadows at six sites.
- Loud to moderate traffic noise was reported at mid-morning (approx. 11:00am) on Craig Road in Devon Meadows at two sites.
- Loud to moderate traffic noise was reported on Fisheries Road, at two sites inspected on that road in the early afternoon (1:30 -2:30 pm).
- Loud to moderate traffic noise was reported on Ballarto Road at two sites.

7.5.4 Existing air environment

The major sources of air emissions in the Casey Fields South and Devon Meadows PSP area include the industrial and commercial activities and vehicles using the road network. During the site inspection, observations of visible dust and odour were recorded along with corresponding meteorological conditions.

For the odour observations, a record of the odour intensity, character and odour presence was made following the guidance in the VicEPA Odour Guidance (Publication 1881). It should be noted that the staff conducting the site inspection do not have calibrated noses and therefore the odour records are indicative.

The following sections provide a summary of odour and dust sources observed during the site inspection in the PSP area. A full list of observations from the site inspections is provided in Appendix C.

7.5.4.1 Odour

Odour was observed during the site visit at 25 of the 53 locations that were surveyed, as detailed in Table 7-3 below. 17 of the locations were related to specific businesses including:

- Flower Farms / Nurseries
- Poultry Farms
- Construction Materials

Odour intensities were mainly faint/subtle but some moderate to strong odours were observed. Odour character included organic, sulphuric, cement, hydrocarbon, fertiliser, paint, sweet fertiliser, hay/farm and manure. The odour characters observed are typical of rural farming activities. Odour presence included some transient odours detected on the wind but also frequent odours.

Table 7-3: Summary of site inspection odour observations

Site Address	Business Name	Odour Observation
16 Railway Road, Clyde	LMF Transport PTY LTD	A transient, subtle sulphuric odour was observed on the breeze
1360 Ballarto Road, Clyde	Buncha Flowers	A faint organic odour was observed

Site Address	Business Name	Odour Observation
1470 Ballarto Road, Clyde	Aurora Construction Materials ACM Clyde	A subtle cement odour was observed
1490 Ballarto Road, Clyde	n/a	A garbage-like, slightly sulphuric odour was observed on the breeze, slightly sulphuric smelling
		A subtle cement odour was observed
1591 South Gippsland Highway, Clyde	n/a	A frequent petrol exhaust odour was observed from vehicles on South Gippsland Highway
1780 South Gippsland Highway, Devon Meadows	n/a	A frequent fertiliser-like odour (possibly from active earthworks) was observed
165 Clyde-Five Ways Road, Clyde	n/a	A subtle paint-like odour was observed in the farm shed.
215 Clyde-Five Ways Road, Clyde	n/a	A subtle hay/organic odour was observed.
235 Clyde-Five Ways Road, Clyde	n/a	A frequent hay-like odour was observed.
245 Clyde-Five Ways Road, Clyde	n/a	A frequent organic odour was observed near the greenhouses.
17 Finsbury Road, Devon Meadows	PJ Communications PTY LTD	A subtle, frequent organic odour was observed.
105 Devon Road, Devon Meadows	J & E Wholesale Flowers	A frequent odour of sweet fertiliser was noted on the breeze.
85 Devon Road, Devon Meadows	J & Y Healey PTY	A subtle organic odour was noted onsite.
100 Devon Road, Devon Meadows	South Gippsland Eggs	A subtle farm/hay odour was noted.
135 Devon Road, Devon Meadows	D'Alberto Egg Farm	A subtle hay/farm odour was noted.
60 Devon Road, Devon Meadows	Metro Industrial Sands and TGS Industrial Sands	A moderate-strong organic/fertiliser/manure odour was observed.
85 Clyde – Five Ways Road	Bashkimi Flowers	A faint fertiliser odour was observed on the breeze
71 Fisheries Road, Devon Meadows	Corrigan L&M	A frequent organic manure-like odour was observed.
75 Fisheries Road, Devon Meadows	B&E Flowers	Faint odours of exhaust fumes and an organic odour were observed.
34 Bakers Road, Clyde	Caseys Top Catz Boarding Cattery	A frequent manure odour was observed near the farm next door.
50 Campbells Road, Clyde	Growing Chickens	Frequent organic compost/fertiliser/soil-like odours were observed
30 Clyde Five-Ways Road, Clyde	Fresh Leaf Farms Limited	A faint truck exhaust odour was observed outdoors.
110 Campbells Road, Clyde	Plantex Nursery	A frequent odour of cut grass was observed onsite, and a strong organic odour was observed near to wet ground.
South Gippsland Highway	n/a	A subtle odour of petrol exhaust and car fumes was observed
109-111 Craig Road, Devon Meadows	Limnos Poultry	A frequent hay/organic odour and raw chicken odour were observed.

7.5.4.2 Dust

Dust was observed during the site visit at 4 of the 53 locations that were surveyed, as detailed in Table 7-4. All observations of dust related to vehicles travelling over unpaved surfaces (gravel roads).

Table 7-4: Summary of site inspection dust observations

Site Address	Business Name	Odour Observation
1360 Ballarto Road, Clyde	Buncha Flowers	Vehicle traffic on Ballarto Road outside the property was observed to suspend dust from the gravel surface
1470 Ballarto Road, Clyde	Aurora Construction Materials ACM Clyde	Dust was observed at the site entrance, from traffic on the gravel ground
1591 South Gippsland Highway, Clyde	n/a	Vehicles on the gravel road adjacent the property were observed to suspend dust when driving over the gravel
40 Moores Road, Clyde	Crop Wise Fertilisers Pty	Dust was observed, suspended from vehicles driving on the gravel road (Moores Road).

8 Development Opportunities and Constraints

8.1 Land contamination

The following contamination issues should be considered in the planning and development of the Devon Meadows and Casey Fields South PSP:

- Several areas have been identified as having 'high' or 'medium' potential for contamination of land (refer to Appendix D). These properties require further assessment to determine the extent and nature of the contamination (if any).
    - Those sites that have been identified as posing a 'medium' potential for contamination of land should be assessed through a Preliminary Risk Screening Assessment (PRSA) to determine whether an Environmental Audit is required.
    - Those sites that have been identified as posing a 'high' potential for contamination of land should proceed to Environmental Audit if a new land use is proposed. If the land use will not be changed, a PRSA option applies.
- Conducting the PRSA and/or Environmental Audits as part of the planning stages for the Devon Meadows/Casey Fields South PSP rezoning may be considered a constraint due to time and costs required to complete these assessments. Through the application of an Environmental Audit Overlay (EAO), it is considered acceptable to defer the PRSA and/or Environmental Audits until after the planning scheme amendment.
- Discrete or localised areas of contamination identified in the desktop review and site inspections can be managed or remediated during the site development process (unless PRSA/Environmental Audit establishes otherwise). These management activities can be controlled through the preparation of a Construction Environmental Management Plan (CEMP) with the inclusion of an unexpected finds protocol.
    - Small stockpiles of material/equipment and surface waste observed at several properties may require disposal under the future land use scenario. In this case, they should be disposed of at a suitably licenced facility as part of future site development activities.

8.2 Geotechnical

Geotechnical investigations are recommended to be completed to inform the design and construction stages of the project, and shall adhere to AS1726-2017.

Desktop study assessments have indicated that the site is underlain by clays, sands and silts of variable thickness, which are underlain by sandstone, mudstone and basalt. Design of any pile foundations/shallow footings should consider soil thickness, compressibility, consolidation, expansive characteristics and high variability of rock weathering and strength expected on this site.

Groundwater is expected at shallow depths (<5m) across a majority of the project site. Pumps or sumps may be required for excavation works to lower the likelihood of constructability issues. Disposal of groundwater will need to be controlled and monitored as desktop assessments indicate moderate to high salinity levels.

Due to a high likelihood of encountering loose to medium dense sands and soft to firm clays at surface, safe batter angles for cut slopes will likely be shallow in some areas across site and may require strict benching/battering or ground improvement.

Ground improvement may be required for extensive fill, topsoil or soft to firm clays, particularly within Quaternary Peaty Clay (Q5) material which is expected to be encountered along water courses on the north side of the site.

Quaternary/Baxter formation sands are expected to underlie a majority of the site at shallow depths. Cemented sand layers may be present at shallow depths within this geology which can impede excavation progress and may limit water permeability, leading to potential requirements for subsurface drainage.

Older volcanics basalt may have highly variable weathering characteristics and can result in basalt boulders, or 'floaters', that are surrounded by residual clay material above top of rock level. This may increase the likelihood of

misrepresentation of top of rock level during geotechnical investigations and design, and can lead to instances of over-excavation and structural fill replacement during construction stages.

High plasticity clays from Older Volcanics, and potentially from Quaternary soils, may lead to trafficability issues on site when exposed to moisture at surface (i.e. vehicle bogging).

Sands and non-expansive clays expected to be encountered within Quaternary and Baxter Sandstone geologies may be re-used for structural fill, depending on the type of use and material grading, plasticity and aggressivity characteristics of the soil.

There is a possibility that issues relating to settlement may occur on future structures which would be dependent on the following:

- Scale of nearby existing or historic open-cut mines
- Susceptibility of subsurface material to settlement
- Scale and sensitivity of proposed structure
- Any long-term or permanent dewatering for development excavations

Further site inspections, geotechnical investigations and design developments are required to determine the need for settlement gauges on significant infrastructure.

8.3 Hydrogeology

As indicated in Section 7.3, the groundwater is expected to be found at shallow depths in the PSP. As such, special consideration and allowance for groundwater control measures in the design requirements may be required as described in Section 8.2 during the development of the site. Groundwater monitoring bores should be considered before development occurs to confirm the depth of the groundwater so that a better understanding of groundwater conditions is developed and learnings incorporated into the development design.

As indicated in Section 5.8.3, Terrestrial GDE have been identified within the PSP. Further investigation would be required to better determine the nature and extent of the Terrestrial GDEs which may require special consideration in the development of the site. Groundwater monitoring should be considered particularly if significant dewatering or extraction is expected during development which may impact the GDEs.

As indicated in Section 5.8.2, groundwater quality is likely brackish for most of the PSP. As such, dewatering or extraction is required, particularly for the consideration of the disposal of water. Additionally, if there are any plans to use the groundwater for irrigation of parks and gardens then site-specific groundwater quality testing and analysis is recommended. Similarly, if any infrastructure is to be placed below the water table then an understanding of groundwater quality and its aggressivity to infrastructure should be made.

8.4 Hydrology

Melbourne Water is the drainage authority responsible for the waterways and floodplains in the area. The various drainage lines indicated in the Land Subject to Inundation and Floodway Overlays are known as Wylies Drain and associated branches. The drains eventually converge prior to discharging into Western Port Bay.

Melbourne Water currently does not have an active Drainage Scheme (also known as Development Services Scheme) covering the area which provides drainage and stormwater quality infrastructure masterplan to manage development runoff. It would be expected that a Drainage Scheme would be developed by Melbourne Water as part of any development planning of the catchment.

8.5 Adverse amenity

8.5.1 Air quality

Whilst air quality in rural environments is generally good and below the acceptable limits, there is the potential for amenity impacts to occur as a result of the existing activities in the Casey Fields South and Devon Meadows PSP areas, including odour and dust.

In particular, the Flower Farms / Nurseries and Poultry Farms in the area have the potential to generate offsite odours that could impact sensitive land uses if encroachment were to occur. This would constrain the operations of these businesses

Some construction material wholesale operations that were also shown to generate odours. Whilst not specifically observed, these operations also have the potential to generate dust from the handling and storage (stockpiling) of materials.

8.5.2 Noise

Loud traffic noise can be tolerable in open, rural areas and industrial/commercial zones, but there is potential for amenity impacts if land use changes in the future precinct development, for example to residential. Traffic noise along South Gippsland Highway was of particular note. Noise monitoring along the South Gippsland Highway and other major roads (Ballarto Road, Clyde-Five Ways Road, Craig Road, and Fisheries Road) would inform future planning decisions, plans and designs.

9 Conclusions

9.1 Contamination

Based on the information gathered during the Stage 1 and Stage 2 assessments, the following conclusions can be made in relation to the Casey Fields South and Devon Meadows PSP:

- The desktop assessment found that the PSP has had mixed uses over its history, including:
    - sand extraction (quarries) along Devon Road (35 – 60) and Craig Road (40W-48W).
    - market gardens and flower nurseries,
    - poultry farms,
    - other agricultural farms, and
    - rural residences.
- Based on the visual inspections and desktop assessment conducted, properties can be classified as follows:
    - A total of twenty-one properties were assessed as presenting a high potential for contamination due to current and/or former activities. These activities include but are not limited to sewage treatment, service stations, flower growing, and quarrying.
    - A total of forty-one properties were assessed as presenting a medium potential for contamination due to current and/or former activities. These activities include but are not limited to egg farming, scrap metal recovery, and agriculture.
    - A total of six properties were assessed as presenting a low potential for contamination due to current and/or former activities. These activities include residential use and roadways.

9.2 Geotechnical

Based on desktop study assessments, the following subsurface materials are expected to be encountered on site:

- **Quaternary Siliceous Sand Dunes and Sheets (Q2)** – in parts across entire site, primarily in Section 1 South and Section 2 South West.
- **Baxter Sandstone (Tb)** – in parts across entire site, primarily in Section 1 North, Section 2 North and Section 2 South East.
- **Quaternary Peaty Clay (Q5)** – localised to water courses in Section 1 North, Section 2 North and Section 2 South East.
- **Older Volcanics (Tob)** – Surfacing on north side of Section 1 North and underlying Baxter Sandstone (Tb).
- **Silurian Sandstone (S)** – Surfacing on west side of Section 1 South and underlying all other materials on site.

Desktop assessments have identified the following key geotechnical implications for the proposed project site:

- Ground improvement may be required in areas of excessive topsoil, fill and/or soft to firm clays, particularly in Quaternary Peaty Clay (Q5) material
- Cemented sand is expected to be encountered within Q2 material, potentially impeding excavation progress and site drainage
- High likelihood of variable top of rock levels and rock weathering characteristics due to presence of Older Volcanics basalt and geological complexity from varying geologies across site
- Potential trafficability issues with exposure of surficial high plasticity clays of Older Volcanics and Quaternary origin to moisture
- Potential excavatability issues with shallow rock and basalt ‘floaters’ requiring over-excavation and replacement with structural fill

- Sands and non-expansive clays expected to be encountered within Quaternary and Baxter Sandstone geologies may be re-used as structural fill, depending on material characteristics and type of use
- Settlement of future infrastructure due to nearby historic mine use, subsurface material susceptibility to settlement, scale and sensitivity of proposed structure and any long term or permanent dewatering for development excavations.

Further geotechnical site investigations are required for future design and construction stages. These investigations should include a combination of boreholes and test pits to assess subsurface layering, top of rock level, material properties, groundwater levels and aggressivity conditions. It is recommended that preliminary investigations would primarily involve test pit excavations, but deeper borehole investigations, in combination with Cone Penetration Tests if deemed necessary, should be completed for any deep foundations or retaining structures.

9.3 Sodic Soils

There is potential risk of soil erosion and sediment pollution if sodic soils (where present) are exposed, stockpiled and where water from sodic soil runoff, excavations or ponding on surface is allowed to drain offsite in an uncontrolled manner. Urban development and construction involving ground disturbance, and vegetation removal, can expose sodic/dispersive soils to water and wind erosion. If underlying clays are exposed during works, these soils will requirement careful management to prevent sediment pollution loads in runoff and drainage to local drainage lines.

Erosion and sediment pollution risks are able to be routinely managed by the construction industry, and the best practice measures are well documented in industry and EPA guidance. Any soil profiles identified in the study area having clay in topsoil or subsoil should be assumed as having some sodic / dispersion risk that should be appropriately managed by the developer at time of making planning and development applications to Council. The developer should demonstrate management of construction sites in accord with Industry Sediment and Pollution control codes (eg. IECA Best Practice Erosion and Sediment Control Guidance, and VPA's Engineering Design and Construction Manual for subdivision in Growth Areas - Addendum 19-01 Sodic and Dispersive Soils (currently in Draft)), and EPA Victoria Guidance including EPA Construction techniques for sediment pollution control (Pub 275) including development of ESC Plans as part of CEMPs.

9.4 Hydrogeology

Based on desktop study assessments, the following is expected to be encountered on site:

- Groundwater is expected to be encountered at shallow depths in parts of the site.
- Groundwater quality is expected to be brackish across most of the site.
- Terrestrial GDEs have been identified.

Installation of groundwater monitoring bores should be considered to better understand the depth to groundwater and water quality so as to inform future design and construction stages. Bore installation could be combined with geotechnical or any contaminated land investigation drilling to provide cost efficiencies.

Inspections of identified terrestrial GDEs by an ecologist should occur to assess impacts that may occur from development and any mitigation measures that may be required. Monitoring of depth to groundwater near significant terrestrial GDEs may be required to assess impacts that may occur from development and any mitigation measures that may be required.

9.5 Hydrology

The PSP covers four subcatchments and contains four waterways known as Wylies Drain and associated branches. The study area receives rainfall between 750mm – 850 mm annually. Parts of the catchment upstream contains established and new residential developments, whilst the downstream areas are predominantly farming and low density land uses. The various waterways are expected to flood during larger rain events as indicated in the LSIO and Urban Flood Zone which traverses across multiple property boundaries. It is currently not known if there has been further flood studies completed for the various waterways.

Melbourne Water currently does not have an active Development Services Scheme (DSS) covering the study area which is a drainage and stormwater quality infrastructure masterplan to appropriately manage runoff from new

development. It would be expected that a DSS would be developed by Melbourne Water as part of any development planning of the catchment.

9.6 Adverse amenity

9.6.1 Air quality

The site inspection of the Casey Fields South and Devon Meadows PSP area observed offsite odours and visible dust at a number of locations. Odours were observed in proximity to the numerous industrial activities within the PSP area including Flower Farms / Nurseries, Poultry Farms and Construction Material Wholesalers. Dust was observed from vehicles using unsealed roads.

It is recommended that prior to any land-use planning changes or upgrades, a detailed assessment of buffer zones is conducted using the VicEPA Separation Distance Guideline (Publication 1949). The detailed assessment would establish suitable separation between existing activities and zones where development could occur.

9.6.2 Noise

The existing noise environment:

- The South Gippsland Highway and main roads (Ballarto Road, Clyde-Five Ways Road, Craig Road, and Fisheries Road) were reported to have moderate to loud traffic noise.
- Commercial enterprises along Devon Road were reported to have low to moderate noise levels associated with machinery, vehicles and processes at these sites.

The noise observations recorded during site inspections on 23 and 28 November 2022 were subjective, not quantitative. Noise monitoring would be required to quantify noise levels along the highway and major roads to evaluate adverse amenity against Australian Standards for any proposed changes to land use and to inform future planning decisions.

10 Recommendations

The following further works are recommended:

Contaminated Land

1. Completion of Preliminary Risk Screening Assessments (PRSAs) at all properties identified as posing a 'medium' potential for contamination and a proposed sensitive use. This recommendation applies to thirty-seven properties assessed as part of this investigation. These PRSAs will determine whether an Environmental Audit is required and should be undertaken during planning stages. However, through the application of an Environmental Audit Overlay (EAO), it is considered acceptable to defer the PRSA and/or Environmental Audits until after the planning scheme amendment.
2. Application of an Environmental Audit Overlay (EAO) to the twenty-three properties identified as posing a 'high' potential for contamination and a proposed sensitive use. The application of an EAO recognises the requirement of an Environmental Audit if the site is to be used for a sensitive use such as residential, schools and community centres. If time constraints do not allow an Environmental Audit to be undertaken during planning stages, the audit can be conducted after the planning scheme amendment.
3. Completion of a hazardous materials assessment for existing properties to assess for asbestos-containing materials and lead-based paints. If these hazardous materials are found to be present, controls should be put in place during construction and demolition works to prevent exposure to works and future users of the site. It is recommended that the hazardous materials assessments are scheduled as soon as possible.
4. Removal of underground storage tanks (USTs) on a site-by-site basis during future site development. The USTs should be removed prior to construction works at the site.
5. Removal of septic tanks on a site-by-site basis during future site development, followed by soil validation. Intrusive groundwater investigation should be considered if impacts to groundwater are likely.
6. Classification and removal (if required) of stockpiles and dumped surface waste observed at sites across the PSP areas (see Appendix C for inspection findings), on a site-by-site basis during future site development.

Geotechnical

7. Geotechnical investigation on a site-by-site basis, including a combination of boreholes and test pits to assess subsurface layering, top of rock level, material properties, groundwater levels and aggressivity conditions. Preliminary investigations should primarily involve test pit excavations, but deeper borehole investigations should be completed for any deep foundations or retaining structures. Geotechnical site investigation works should be carried out as early as feasibly practical in the design process to enable currently unknown geotechnical risks to be identified and mitigated within the design. The scope of the geotechnical investigation in terms of location, depth, frequency and method of excavation works will be guided by the intended works, (size of structures, presence of cut or fill earthworks, location and depth of infrastructure). A geotechnical investigation following concept design is therefore recommended.

Hydrogeology

8. Installation of groundwater monitoring bores should be considered to better understand the depth to groundwater and water quality so as to inform future design and construction stages.
9. Inspections of identified terrestrial GDEs by an ecologist, on a site-by-site basis. This should be undertaken during the design stage to better understand depth to groundwater and water quality.
10. Monitoring of existing groundwater bores to confirm groundwater conditions based on the risk of the proposed land use affecting groundwater or impacts of groundwater on below-ground infrastructure.
11. Due to the brackish nature of the groundwater in the PSP, it may require careful monitoring if dewatering or extraction is required during construction works within the PSP, particularly for the consideration of the disposal of water.

Sodic and Dispersive Soils

12. All land developers should be required to further investigate and identify potential existence of sodic and dispersive soils to assess vulnerability for erosion if exposed or disturbed.

13. Any soil profiles with clay in topsoil or subsoil identified in the study area should be assumed as having some sodic / dispersion risk that should be managed by the developer at time of making development applications to council.
14. The developer should demonstrate appropriate management of construction sites in accord with Industry Sediment and Pollution control codes (eg. IECA Best Practice Erosion and Sediment Control Guidance, and VPA's Engineering Design and Construction Manual for subdivision in Growth Areas - Addendum 19-01 Sodic and Dispersive Soils (currently in Draft)), and EPA Victoria Guidance including EPA Construction techniques for sediment pollution control (Pub 275) including development of ESC Plans as part of CEMPs.
15. ESC plans should identify effective procedures to stabilise the soils, including options such as chemical treatment of soils, careful staging of works to minimise sodic soil exposure to rainfall and overland flows, and installation of sediment collection works (sily fences, mulch berms, sediment ponds, filter dams, grass filter strips, etc etc) as recommended in industry and EPA guidance.

Geomorphology and Hydrology

16. Geomorphological assessment of waterways to assess their current condition and likely impacts from hydrology and hydraulics in future development. This task should be undertaken as part of the planning stage of works.

Adverse amenity - Noise

17. Noise monitoring is recommended along South Gippsland Highway to quantify noise levels, determine any buffer requirements, and inform planning decisions for the PSP. This should be undertaken as part of the planning stage of works.
18. Consideration to undertake noise monitoring along other major roads in the CSF and DM PSP area (Ballarto Road, Clyde-Five Ways Road, Craig Road, and Fisheries Road) to inform precinct planning. This should be undertaken as part of the planning stage of works.

11 References

Australian Government, *Geosciences Australia Geological Mapping*, (Continental Geology Section | Geoscience Australia (ga.gov.au))

CSIRO, *Australian Soil Resource Information System*, (A S R I S (csiro.au))

Dahlhaus P.G., Heislers D.S., Brewin D., Leonard J.L., Dyson P.R. & Cherry D.P. (2004). Port Phillip and Westernport Groundwater Flow Systems. Port Phillip and Westernport Catchment Management Authority, Melbourne, Victoria.

EPA Victoria, *Recommended separation distances for industrial residual air emissions*, Publication 1518, March 2013

EPA Victoria Publication 1883, 2022, Guideline for assessing odour, Victoria State Government

EPA Victoria Publication 1949, 2022, Separation Distance Guideline, Victoria State Government (draft)

EPA Victoria Publication 1961, 2022, Guideline for assessing and minimising air pollution in Victoria, Victoria State Government

Environment Protection Act 2017 (the Act) (as amended 2018), Victorian Government.

Environment Protection Regulations, 2021, Victorian Government.

Environment Reference Standard 2021, Victoria State Government

Lotsearch®, *Report Reference LS035757 EL*, 30 August 2022

Northcote and Skene, *Australian soils with saline and sodic properties*, 1972

SLR, *Geotechnical, Sodic Soils, Hydrogeological, Contamination and Odour Review*: *Devon Meadows Precinct Structure Plan Area*, December 2021

Victorian Department of Environment and Primary Industries, Victorian Resources Online, Agriculture Research Division, (Victorian Resources Online | VRO | Agriculture Victoria)

Victorian Department of Environment, Land, Water and Planning, *Potential Contaminated Land, Planning Practice Note 30*, July 2021

Victorian Environment, Land, Water and Planning, *Managing buffers for land use compatibility*, Planning Note 92, March 2021

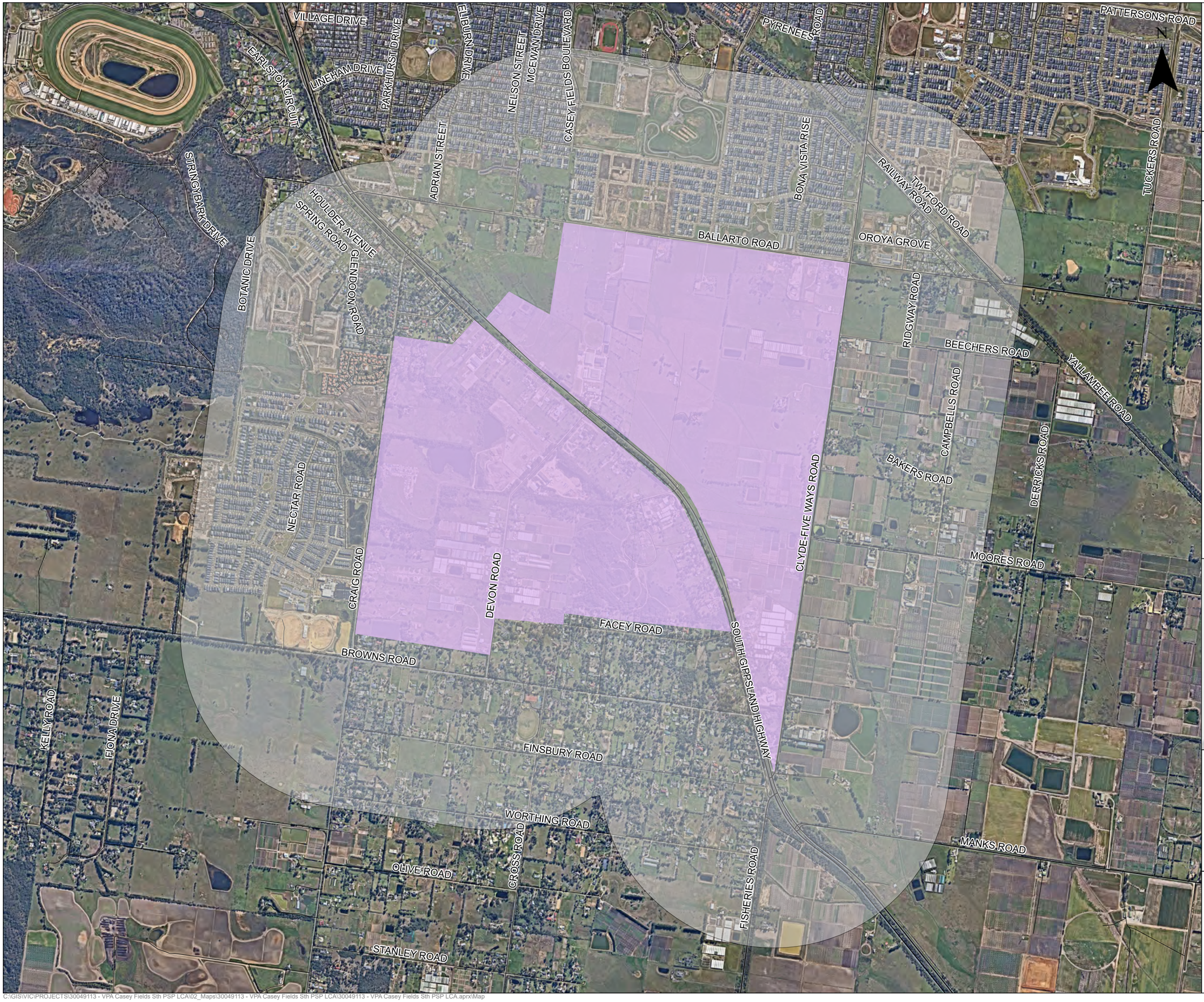
Victorian Planning Authority, *Engineering Design and Construction Manual for Subdivision in Growth Areas*, Addendum 19-01 Sodic and Dispersive Soils (Currently as working draft 2023)

Victorian Resources Online. (2021) Soils of the Cranbourne - Koo Wee Rup Region – West, from https://vro.agriculture.vic.gov.au/dpi/vro/portregn.nsf/pages/ppw_soil_cranbourne_west

Victoria State Government, *Victoria Unearthed*, (Victoria Unearthed (environment.vic.gov.au))

Visualising Victoria Groundwater, (Visualising Victoria's Groundwater (vvg.org.au))

Appendix A – Figures



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 220 440 660 880
Meters

Scale:1:19,873 @ A3
GDA2020 MGA Zone 55

LEGEND

- Site Boundary
- 1km Buffer

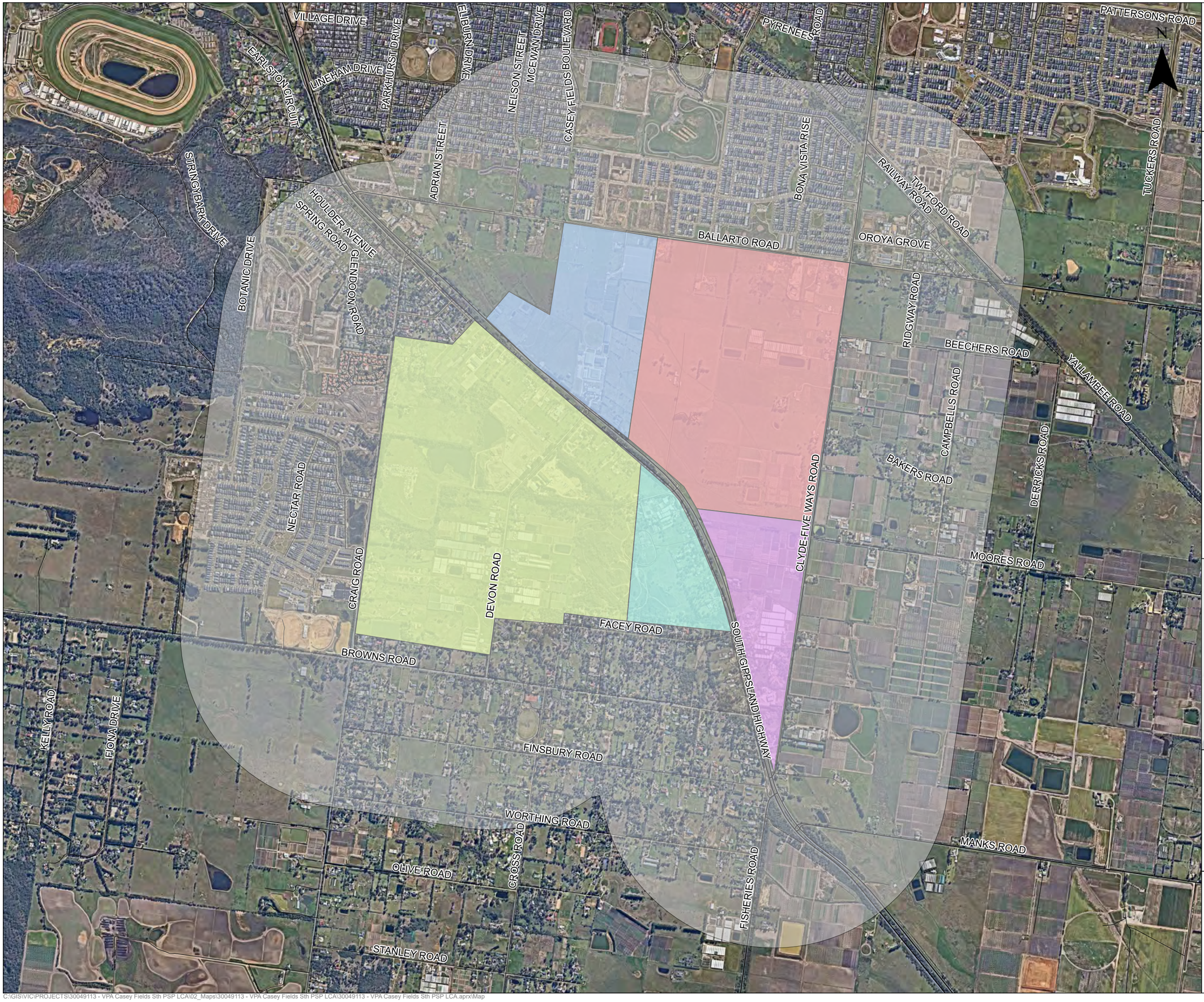
KEY MAP

SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © World Light Gray Reference: Esri, HERE
World Light Gray Canvas Base: Esri, HERE, Garmin, USGS
Nearmap WMS Server:

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, this map contains data from a number of sources - no warranty is given that the information contained on this is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of all information prior to using it. This map is not a design document.

PROJECT:	VPA Casey Fields Sth PSP LCA
PROJECT NO:	30049113
FIGURE NO:	1
FIGURE TITLE:	Site Boundary
CREATED BY:	JZ15939
DATE:	28/09/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - VPA Casey Fields Sth PSP LCA\02_Maps\30049113 - VPA Casey Fields Sth PSP LCA\30049113 - VPA Casey Fields Sth PSP LCA.aprx\Map



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 220 440 660 880
Meters

Scale:1:19,873 @ A3
GDA2020 MGA Zone 55

LEGEND

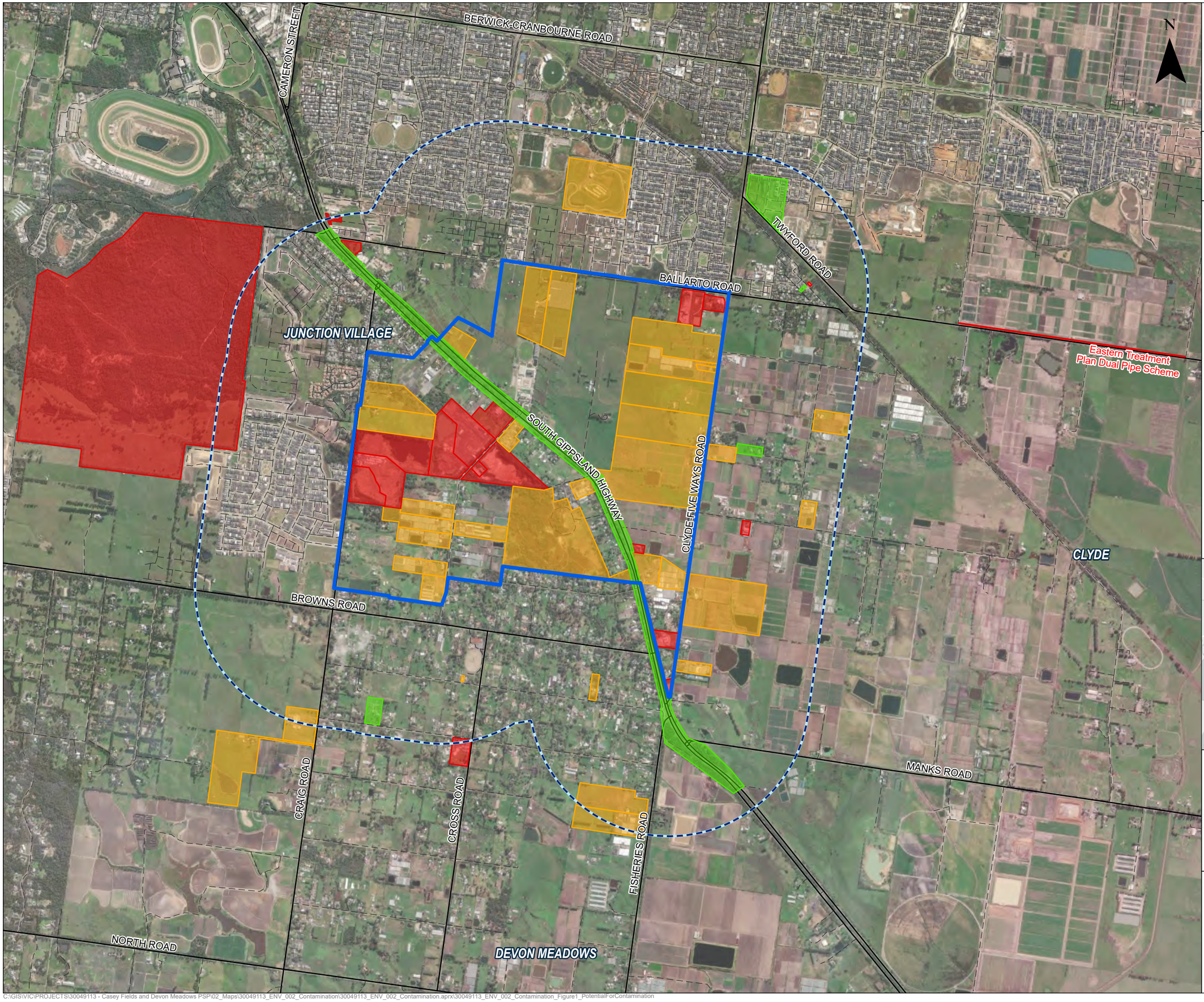
Area Sections

- Section 1 North
- Section 1 South
- Section 2 North
- Section 2 South East
- Section 2 South West
- 1km Buffer

KEY MAP

PROJECT:	VPA Casey Fields Sth PSP LCA
PROJECT NO:	30049113
FIGURE NO:	2
FIGURE TITLE:	Site Boundary
CREATED BY:	JZ15939
DATE:	28/09/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - VPA Casey Fields Sth PSP LCA\02_Maps\30049113 - VPA Casey Fields Sth PSP LCA\30049113 - VPA Casey Fields Sth PSP LCA.aprx\Map



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 250 500 750 1000
Meters

Scale:1:25,000 @ A3
GDA2020 MGA Zone 55

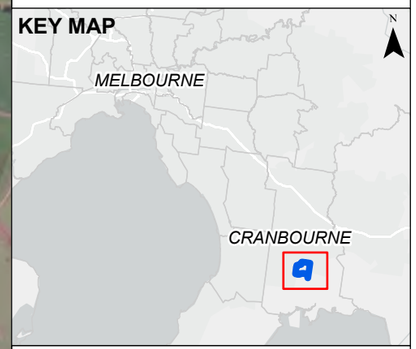
LEGEND

- Major road
- Minor road
- Casey Fields and Devon Meadows PSP area
- 1km buffer

Potential for Contamination

- High risk
- Medium risk
- Low risk

KEY MAP

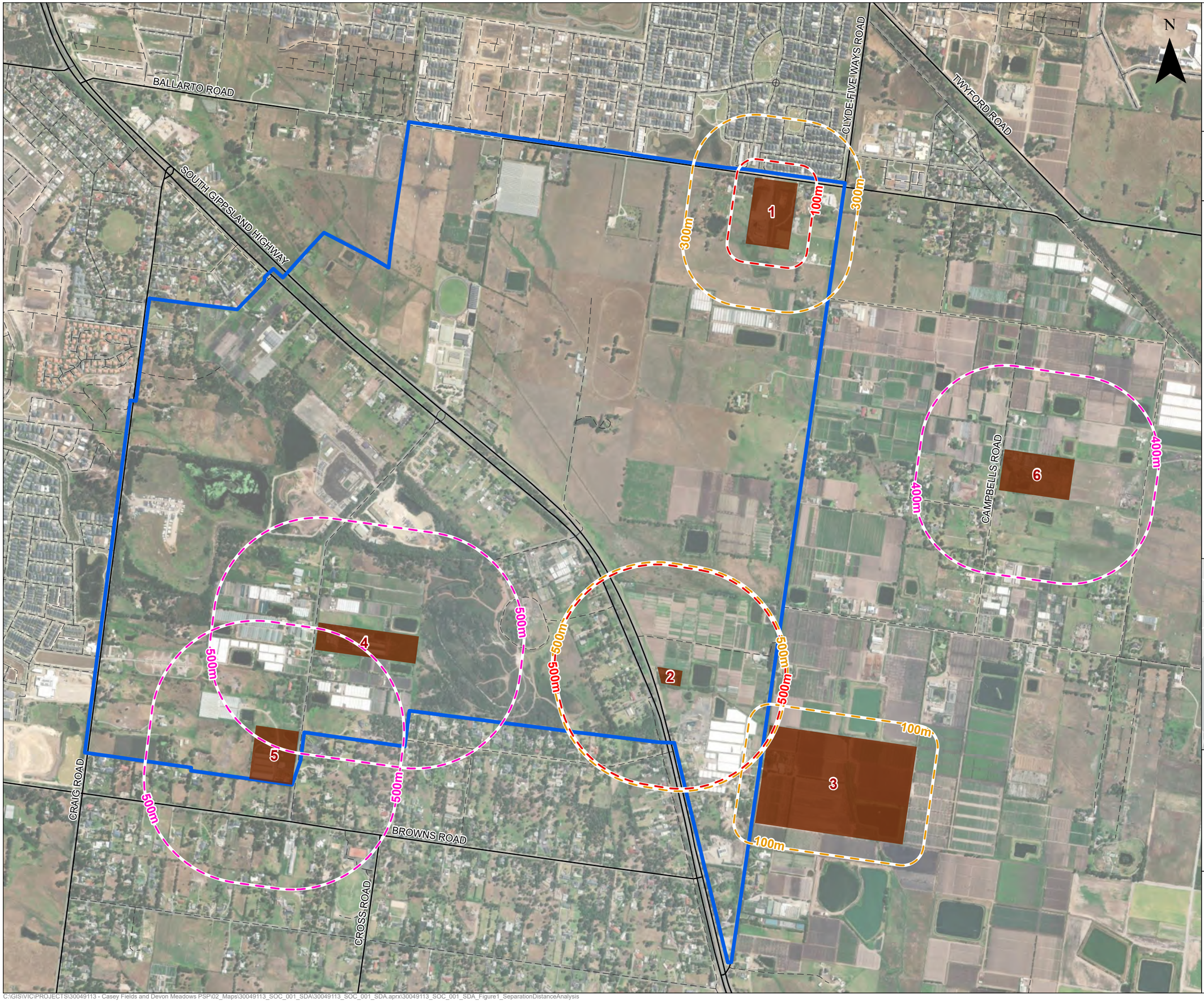


SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © Light Gray Base: Vicmap, Esri, HERE, Garmin, FAO, NOAA, USGS
World Imagery: Maxar

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, this map contains data from a number of sources - no warranty is given that the information contained on this is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of all information prior to using it. This map is not a design document.

PROJECT:	Casey Fields and Devon Meadows PSP
PROJECT NO:	30049113
FIGURE NO:	3
FIGURE TITLE:	Potential for Contamination
CREATED BY:	AP15941
DATE:	16/12/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - Casey Fields and Devon Meadows PSP\02_Maps\30049113_ENV_002_Contamination\30049113_ENV_002_Contamination.aprx\30049113_ENV_002_Contamination_Figure1_PotentialForContamination



SMEC
Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

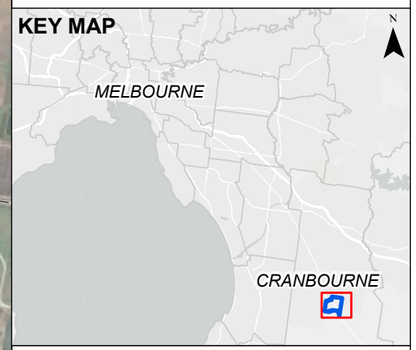
0 150 300 450 600
Meters

Scale:1:13,000 @ A3
GDA2020 MGA Zone 55

LEGEND

- Casey Fields and Devon Meadows PSP area
- Major road
- Minor road
- **Industrial lots**
  - 1: Aurora Construction Materials
  - 2: Clear View Commercial Glass
  - 3: LJ Kitchen
  - 4: South Gippsland Eggs
  - 5: D'Alberto Egg Farm
  - 6: Growing Chickens
- **Separation Buffer Distance**
  - EPA Pub. 1510
  - Clause 53.10
  - Other

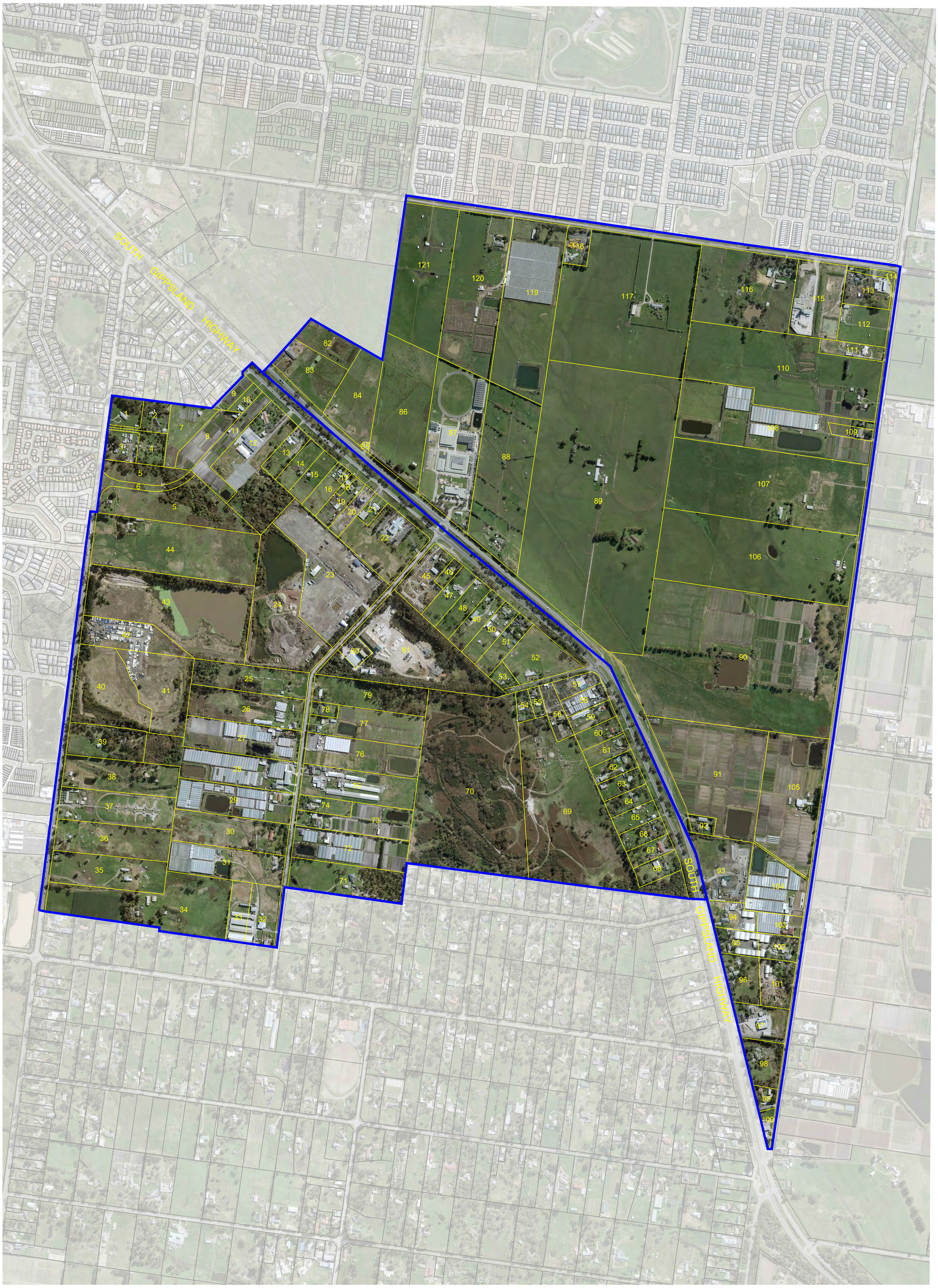
KEY MAP



SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © Light Gray Base: Vicmap, Esri, HERE, Garmin, Foursquare, FAO, METI/NASA, USGS
World Imagery: Maxar

PROJECT:	Casey Fields and Devon Meadows PSP
PROJECT NO:	30049113
FIGURE NO:	4
FIGURE TITLE:	Separation Distance Analysis
CREATED BY:	AP15941
DATE:	15/12/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - Casey Fields and Devon Meadows PSP\02_Maps\30049113_SOC_001_SDA\30049113_SOC_001_SDA.aprx\30049113_SOC_001_SDA_Figure1_SeparationDistanceAnalysis



A	INITIAL RELEASE	28/11/22	AMM
VERSION	AMENDMENT DESCRIPTION	DATE	APP'D

N
W E
S

MGA94 ZONE55

0 60 120 240

1:6000 @ A1

SURVEY BY

SMEC

Member of the Surbana Jurong Group

TOWER 4, LEVEL 20, 727 COLLINS STREET
DOCKLANDS VIC 3008

CLIENT

Victorian Planning Authority

SURVEYOR		
DRAWN	S. BARNES	28/11/22
CHECKED	A. MACKENZIE	28/11/22
APPROVED	A. MACKENZIE	28/11/22

CASEY FIELDS AND DEVON MEADOWS PSP CASEY CITY COUNCIL TITLE COMPILATION PLAN

PROJECT/DRAWING NO.	SHEET NO.	VERSION
30049113.05	1 OF 2	A

DWG PATH: C:\Users\Public\Temp\AcPublish_19212\30049113.01 Ver A.dwg PRINTED: 30/11/2022 at 12:23:48 PM

ID	VOL FOL	LAND DESCRIPTION	PROPRIETOR	STREET ADDRESS
1	VOLUME 10358 FOLIO 039	Lot 2 on Plan of Subdivision 348801X	MINGXIANG JIA of 49 CRAIG ROAD BOTANIC RIDGE VIC 3977	28A CRAIG ROAD JUNCTION VILLAGE VIC 3977
2	VOLUME 10358 FOLIO 040	Lot 3 on Plan of Subdivision 348801X	KEITH DAMON KIRKWOOD of CRAIG RD. DEVON MEADOWS 3977	28B CRAIG ROAD JUNCTION VILLAGE VIC 3977
3	VOLUME 10358 FOLIO 038	Lot 1 on Plan of Subdivision 348801X	KEITH DAMON KIRKWOOD & LINDA JANE KIRKWOOD both of 28B CRAIG ROAD JUNCTION VILLAGE VIC 3977 SHANON JAMES KIRKWOOD of 28B CRAIG ROAD JUNCTION VILLAGE VIC 3977	30A CRAIG ROAD JUNCTION VILLAGE VIC 3977
4	VOLUME 10358 FOLIO 041	Lot 4 on Plan of Subdivision 348801X	MARGARET PATRICIA CAFFYN of 30B CRAIG ROAD JUNCTION VILLAGE VIC 3977	30B CRAIG ROAD JUNCTION VILLAGE VIC 3977
5	VOLUME 12314 FOLIO 639	Lot 1 on Plan of Subdivision 841883S	SAVVAS CHARALAMBOUS & FAY CHARALAMBOUS both of CRAIG ROAD CRANBOURNE SOUTH VIC 3977	32-34 CRAIG ROAD JUNCTION VILLAGE VIC 3977
6	VOLUME 12314 FOLIO 640	Road R1 on Plan of Subdivision 841883S	CASEY CITY COUNCIL of PATRICK NORTHEAST DRIVE NARRE WARREN VIC 3805	
7	VOLUME 10057 FOLIO 643	Lot 1 on Plan of Subdivision 309869G	DOMENICO SOTTILE & CLARA SOTTILE both of 4 HOULDER AVENUE CRANBOURNE 3977	11 JUNCTION CLOSE JUNCTION VILLAGE VIC 3977
8	VOLUME 10057 FOLIO 644	Lot 2 on Plan of Subdivision 309869G	CARMELO BELLINVIA & DOMENICA BELLINVIA both of 36 DUFF STREET CRANBOURNE 3977	JUNCTION CLOSE DEVON MEADOWS VIC 3977
9	VOLUME 09045 FOLIO 245	Lot 2 on Plan of Subdivision 088493	CASEY CITY COUNCIL of MAGID DRIVE NARRE WARREN VIC 3805	1 JUNCTION CLOSE JUNCTION VILLAGE VIC 3977
10	VOLUME 09667 FOLIO 164	Lot 8 on Plan of Subdivision 023766	ROBERT KEVIN PELUSO of 5 HILLRISE CL NARRE WARREN 3805	1714 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
11	VOLUME 07401 FOLIO 090	Lot 1 on Plan of Subdivision 019278	CASEY CITY COUNCIL of MAGID DRIVE NARRE WARREN VIC 3805	1720 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
12	VOLUME 12210 FOLIO 033	Land in Plan of Consolidation 378263U	NEW COVENANT PENTECOSTAL CHURCH INC of 681-685 HEATHERTON ROAD CLAYTON SOUTH VIC 3169	1724 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
13	VOLUME 11172 FOLIO 952	Lot 1 on Plan of Subdivision 034228	SIKH COMMUNITY GURMAT CENTRE INC of 16 GUISARD WAY CLYDE NORTH VIC 3978	1734 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
14	VOLUME 08202 FOLIO 457	Lots 2 and 3 on Plan of Subdivision 034228	GARY RAYMOND DUNKLEY of 6 CRONULLA CLOSE KEWARRA BEACH QLD 4879 GAYLE CHRISTINE MOORE of 2 MARGARET ROAD HEALESVILLE VIC 3777 PETER JOHN DUNKLEY-PRICE of 440 NORTH ROAD LANGWARRIN VIC 3910 LYNNE MAXINE FAIRBROTHER of 26-28 WORTHING ROAD DEVON MEADOWS VIC 3977	
15	VOLUME 08202 FOLIO 457	Lots 2 and 3 on Plan of Subdivision 034228	GARY RAYMOND DUNKLEY of 6 CRONULLA CLOSE KEWARRA BEACH QLD 4879 GAYLE CHRISTINE MOORE of 2 MARGARET ROAD HEALESVILLE VIC 3777 PETER JOHN DUNKLEY-PRICE of 440 NORTH ROAD LANGWARRIN VIC 3910 LYNNE MAXINE FAIRBROTHER of 26-28 WORTHING ROAD DEVON MEADOWS VIC 3977	
16	VOLUME 08191 FOLIO 366	Lot 1 on Title Plan 876188C	MARK PETER FAIRBROTHER of 28 WORTHING ROAD DEVON MEADOWS VIC 3977	1744 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
17	VOLUME 08168 FOLIO 970	Lot 1 on Title Plan 818632N	JUDITH MARGARET REID of 1750 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1750 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
18	VOLUME 09435 FOLIO 296	Lot 1 on Title Plan 078973G	SEVDIM ISMAILI of 1754 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1754 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
19	VOLUME 08641 FOLIO 727	Lot 1 on Title Plan 619843J	KEVIN LESLIE WYNNE & DIANNE LESLIE ARNOLD both of COMMERCIAL STREET KORUMBURRA	1758 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
20	VOLUME 08634 FOLIO 685	Lot 1 on Plan of Subdivision 071486	FERDI LUMANOVSKI of 1760 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1760 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
21	VOLUME 10538 FOLIO 067	Lot 1 on Plan of Subdivision 433426Y	JULIE-ANNE VERONICA LEDBURY of 1770 SOUTH GIPPSLAND HIGHWAY CRANBOURNE VIC 3977	1770 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
22	VOLUME 10538 FOLIO 068	Lot 2 on Plan of Subdivision 433426Y	CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS of 756 PENNANT HILLS ROAD CARLINGFORD NSW 2118	1780 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
23	VOLUME 11542 FOLIO 979	Lot 1 on Plan of Subdivision 712706N	RAILWAY TRANSPORT SERVICES PTY LTD of 35 DEVON ROAD DEVON MEADOWS VIC 3977	35 DEVON ROAD DEVON MEADOWS VIC 3977
24	VOLUME 11542 FOLIO 980	Lot 2 on Plan of Subdivision 712706N	THE DONNELLY GROUP PTY LTD of 2/860 BALLARTO ROAD CRANBOURNE VIC 3977	55 DEVON ROAD DEVON MEADOWS VIC 3977
25	VOLUME 08055 FOLIO 656	Lot 16 on Plan of Subdivision 007829	KAYES INVESTMENTS PTY LTD of LEVEL 1 608 ST KILDA ROAD MELBOURNE VIC 3004	65 DEVON ROAD DEVON MEADOWS VIC 3977
26	VOLUME 05492 FOLIO 250	Lot 17 on Plan of Subdivision 007829	STAVROULA MIHALOUDAKIS of 75 DEVON ROAD DEVON MEADOWS VIC 3977	75 DEVON ROAD DEVON MEADOWS VIC 3977
27	VOLUME 09739 FOLIO 192	Lot 1 on Title Plan 337102A	JAMES WILLIAM HEALEY & YOLANDE PAMELA HEALEY both of 85 DEVON RD DEVON MEADOWS 3977	85 DEVON ROAD DEVON MEADOWS VIC 3977
28	VOLUME 11080 FOLIO 495	Lot 1 on Plan of Subdivision 613683A	FIDRIM HALIT of 95 DEVON ROAD DEVON MEADOWS VIC 3977	95 DEVON ROAD DEVON MEADOWS VIC 3977
29	VOLUME 06979 FOLIO 775	Lot 20 on Plan of Subdivision 007829	JASHAR RUSTEMI of 120 DEVON RD DEVON MEADOWS 3977	105 DEVON ROAD DEVON MEADOWS VIC 3977
30	VOLUME 10044 FOLIO 172	Lot 1 on Title Plan 087522R	CORAL FRANCES SAGGERS of 115 DEVON ROAD DEVON MEADOWS VIC 3977	115 DEVON ROAD DEVON MEADOWS VIC 3977
31	VOLUME 05797 FOLIO 344	Lot 22 on Plan of Subdivision 007829	125 DEVON ROAD PTY LTD of 26 MAIN STREET PAKENHAM VIC 3810	125 DEVON ROAD DEVON MEADOWS VIC 3977
32	VOLUME 07954 FOLIO 070	Lots 1 and 2 on Title Plan 621224B	135 DEVON ROAD PTY LTD of 26 MAIN STREET PAKENHAM VIC 3810	
33	VOLUME 07954 FOLIO 070	Lots 1 and 2 on Title Plan 621224B	135 DEVON ROAD PTY LTD of 26 MAIN STREET PAKENHAM VIC 3810	
34	VOLUME 10876 FOLIO 493	Lot 2 on Plan of Subdivision 523906H	RIZANAS PROPERTIES PTY LTD of 70 YALLAMBEE ROAD CLYDE VIC 3978	60 CRAIG ROAD DEVON MEADOWS VIC 3977
35	VOLUME 05388 FOLIO 517	Lot 5 on Plan of Subdivision 007599	WAYNE PAUL MACDONALD & JULIE ANNE MACDONALD both of 58 CRAIG RD DEVON MEADOWS 3977	
36	VOLUME 06750 FOLIO 974	Lot 4 on Plan of Subdivision 007599	GIUSEPPINA PARRA of 16 KOONUNG STREET DANDENONG VIC 3175 DIANA ANGELE of 86 MANNING ROAD MALVERN EAST VIC 3145 VIVIANA RANDAZZO of 29 KARMA AVENUE MALVERN EAST VIC 3145 JOHN GUGLIUCCIELLO of 17 MIRIAM CLOSE WHEELERS HILL VIC 3150 ANNA GUGLIUCCIELLO of 1/31 GEORGE STREET BENTLEIGH EAST VIC 3165	56 CRAIG ROAD DEVON MEADOWS VIC 3977
37	VOLUME 05725 FOLIO 815	Lot 3 on Plan of Subdivision 007599	KENNETH MICHAEL KEYS & LOUISE ALLISON KEYS both of 54 CRAIG ROAD DEVON MEADOWS VIC 3977	54 CRAIG ROAD DEVON MEADOWS VIC 3977
38	VOLUME 08037 FOLIO 972	Lot 2 on Plan of Subdivision 007599	JANET LOUISE SIMMONS of 52 CRAIG RD DEVON MEADOWS 3977	52 CRAIG ROAD DEVON MEADOWS VIC 3977
39	VOLUME 11485 FOLIO 799	Lot 1 on Plan of Subdivision 721912J	ROBYN DENISE MORGAN of 50A CRAIG ROAD DEVON MEADOWS VIC 3977	
40	VOLUME 11841 FOLIO 051	Reserve 1 on Plan of Subdivision 800996K	MELBOURNE WATER CORPORATION of 990 LA TROBE STREET DOCKLANDS VIC 3008	48W CRAIG ROAD DEVON MEADOWS VIC 3977
41	VOLUME 11841 FOLIO 050	Lot 1 on Plan of Subdivision 800996K	BALLOCHMYLE DEVELOPMENTS PTY LTD of 1260 WESTERNPORT HIGHWAY CRANBOURNE SOUTH VIC 3977	
42	VOLUME 11840 FOLIO 999	Lot 1 on Plan of Subdivision 800995M	BALLOCHMYLE DEVELOPMENTS PTY LTD of 1260 WESTERNPORT HIGHWAY CRANBOURNE SOUTH VIC 3977	
43	VOLUME 11841 FOLIO 000	Reserve 1 on Plan of Subdivision 800995M	MELBOURNE WATER CORPORATION of 990 LA TROBE STREET DOCKLANDS VIC 3008	40W CRAIG ROAD DEVON MEADOWS VIC 3977
44	VOLUME 10073 FOLIO 839	Lot 1 on Plan of Subdivision 128889	RALPH PASCUZZI & ROSETTA PASCUZZI both of 93 SPRINGS ROAD CLAYTON	36-38 CRAIG ROAD JUNCTION VILLAGE VIC 3977
45	VOLUME 08866 FOLIO 897	Lot 8 on Plan of Subdivision 084636	SIMONE HILDAGARDE MANNE of 25 OVERTON ROAD FRANKSTON VIC 3199 INGRID CECILE-ELKE WHITE of 4667 THE PARKWAY HOPE ISLAND QLD 4212	1790 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
46	VOLUME 08866 FOLIO 898	Lot 9 on Plan of Subdivision 084636	RAMESH REDDY TALAPAREDDY & JHANSILAKSHMI TALAPAREDDY both of 1794 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1794 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
47	VOLUME 08882 FOLIO 549	Lot 2 on Plan of Subdivision 025813	JOHN ANTHONY BOSNICH of 1800 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1800 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
48	VOLUME 08906 FOLIO 892	Lot 3 on Plan of Subdivision 025813	PAMELA LEONIE & PAUL CHRISTOPHER ANDERTON both of 1810 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1810 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
49	VOLUME 08078 FOLIO 301	Lot 4 on Plan of Subdivision 025813	ADAM HOWARD GASON & LINDA GASON both of 1814 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1814 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
50	VOLUME 08926 FOLIO 297	Lot 5 on Plan of Subdivision 025813	IAN KEITH CASTLES & HELEN JOY CASTLES both of CLYDE RD CLYDE	1820 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
51	VOLUME 08814 FOLIO 791	Lot 6 on Plan of Subdivision 025813	FOTIOS RAMATANIS of 1830 SOUTH GIPPSLAND HIGHWAY FIVE WAYS VIC 3977	1830 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
52	VOLUME 08441 FOLIO 920	Lot 2 on Plan of Subdivision 061150	ARD INVESTMENTS PTY LTD of 235 PEARCEDALE ROAD CRANBOURNE SOUTH VIC 3977	5 RAWLINS ROAD DEVON MEADOWS VIC 3977
53	VOLUME 08441 FOLIO 919	Lot 1 on Plan of Subdivision 061150	ANTHONI EL HANNA of 38 WARRENWOOD PLACE LANGWARRIN VIC 3910	25 RAWLINS ROAD DEVON MEADOWS VIC 3977
54	VOLUME 08591 FOLIO 731	Lot 39 on Plan of Subdivision 034215	COURTNEY SCARLETT MURPHY & GARY STEVEN MURPHY both of 24 RAWLINS ROAD DEVON MEADOWS VIC 3977	24 RAWLINS ROAD DEVON MEADOWS VIC 3977
55	VOLUME 08861 FOLIO 433	Lot 38 on Plan of Subdivision 034215 and Road R1 on Plan of Subdivision 034215	BELINDA GAYE SQUIRES & JASON GATELY both of 20 RAWLINS ROAD DEVON MEADOWS VIC 3977	20 RAWLINS ROAD DEVON MEADOWS VIC 3977
56	VOLUME 09337 FOLIO 596	Land in Plan of Consolidation 108819	WENDY JOY TRIMBLE of 70 BILLINGSLEY ROAD TOORADIN VIC 3980 RAELENE KAYE TRIMBLE of 451 NORTH ROAD LANGWARRIN VIC 3910	14 RAWLINS ROAD DEVON MEADOWS VIC 3977
57	VOLUME 08806 FOLIO 437	Lots 35 and 36 on Plan of Subdivision 034215	TRIMBLE FAMILY SUPER SECURITY PTY LTD of 5 HIGH STREET BUNYIP VIC 3815	
58	VOLUME 08806 FOLIO 437	Lots 35 and 36 on Plan of Subdivision 034215	TRIMBLE FAMILY SUPER SECURITY PTY LTD of 5 HIGH STREET BUNYIP VIC 3815	
59	VOLUME 08179 FOLIO 707	Lot 34 on Plan of Subdivision 034215	YONGLONG TRADING PTY LTD of 1 LORI PLACE GLEN WAVERLEY VIC 3150	1874 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
60	VOLUME 08166 FOLIO 921	Lot 33 on Plan of Subdivision 034215	LEONIE JOY THORNE of 1880 SOUTH GIPPSLAND HIGHWAY CRANBOURNE VIC 3977	1880 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
61	VOLUME 08772 FOLIO 073	Lot 32 on Plan of Subdivision 034215	KARDINIA CORPORATION PTY LTD of LEVEL 10 278 COLLINS STREET MELBOURNE VIC 3000	1884 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
62	VOLUME 08214 FOLIO 122	Lot 31 on Plan of Subdivision 034215	ANDREW WILLIAM JOHN CHESSELLS of 1890 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1890 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
63	VOLUME 08423 FOLIO 118	Lot 30 on Plan of Subdivision 034215	KEVIN THOMAS PHILLIPS of 1894 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977	1894 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
64	VOLUME 08266 FOLIO 554	Lot 29 on Plan of Subdivision 034215	TELIA LEE HEYS of 1900 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977 JAMES WILLIAM HEYS of 4 SHANNON WAY BERWICK VIC 3806	1900 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
65	VOLUME 08166 FOLIO 919	Lot 28 on Plan of Subdivision 034215	JOHN-CLAUDE ROGER LIM-HOW & MARIE ROSE SOLANGE LIM-HOW both of 4 LEONARD CLOSE CLAYTON SOUTH VIC 3169	1910 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
66	VOLUME 08166 FOLIO 920	Lot 27 on Plan of Subdivision 034215	HENRY JOHN HENDY & EVELYN ROSEMARY HENDY both of 31 BROADWAY BONBEACH	1920 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
67	VOLUME 08296 FOLIO 362	Lot 26 on Plan of Subdivision 034215	DOMINIC TRAVAGLIA & ANGELINA TRAVAGLIA both of 15 PORTER RD MOORABBIN	1924 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
68	VOLUME 08240 FOLIO 157	Lot 25 on Plan of Subdivision 034215	JOHANNES JACOBUS GERARDUS VAN DEN MUNCKHOF & SUSAN BEATRICE VAN DEN MUNCKHOF both of 16 PETER STREET DONCASTER	1930 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
69	VOLUME 12246 FOLIO 650	Lot 1 on Title Plan 865405J	KARDINIA CORPORATION PTY LTD of LEVEL 10 278 COLLINS STREET MELBOURNE VIC 3000	1934 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
70	VOLUME 12246 FOLIO 651	Lot 41 on Plan of Subdivision 034215	KARDINIA CORPORATION PTY LTD of LEVEL 10 278 COLLINS STREET MELBOURNE VIC 3000	1934 SOUTH GIPPSLAND HIGHWAY DEVON MEADOWS VIC 3977
71	VOLUME 06979 FOLIO 778	Lot 9 on Plan of Subdivision 007829	KELLY JANE CARVILL of 130 DEVON ROAD DEVON MEADOWS VIC 3977 Executor(s) of GREGORY LEONARD CARVILL deceased	130 DEVON ROAD DEVON MEADOWS VIC 3977
72	VOLUME 08057 FOLIO 787	Lot 10 on Plan of Subdivision 007829	JASHAR RUSTEMI of 105 DEVON ROAD DEVON MEADOWS VIC 3977	120 DEVON ROAD DEVON MEADOWS VIC 3977
73	VOLUME 08513 FOLIO 217	Lot 2 on Plan of Subdivision 063886	GEORGINA ETHEL HEFFORD of 110 DEVON RD. DEVON MEADOWS VIC 3977 JOHN JAMES GIONIS of 110 DEVON RD. DEVON MEADOWS VIC 3977	110 DEVON ROAD DEVON MEADOWS VIC 3977
74	VOLUME 10288 FOLIO 492	Lot 1 on Title Plan 088065N	KEITH RONALD FRAZER of 104 DEVON RD DEVON MEADOWS 3977	104 DEVON ROAD DEVON MEADOWS VIC 3977
75	VOLUME 05482 FOLIO 227	Lot 12 on Plan of Subdivision 007829	GIORGINA VICKI ABRAHAM & ALAN GILBERT ABRAHAM both of 100 DEVON ROAD DEVON MEADOWS VIC 3977	100 DEVON ROAD DEVON MEADOWS VIC 3977
76	VOLUME 08122 FOLIO 004	Lot 13 on Plan of Subdivision 007829	LULZIM JEMAL & LIRIM JEMAL both of 30 ALEXANDER STREET HALLAM VIC 3803	90 DEVON ROAD DEVON MEADOWS VIC 3977
77	VOLUME 10507 FOLIO 867	Lot 2 on Plan of Subdivision 430090X	GRAEME KEITH EDGAR & AMANDA JANE EDGAR both of 80 DEVON RD. DEVON MEADOWS 3977	76-80 DEVON ROAD DEVON MEADOWS VIC 3977
78	VOLUME 10507 FOLIO 866	Lot 1 on Plan of Subdivision 430090X	JANETTE ELIZABETH EVA of 72-74 DEVON ROAD DEVON MEADOWS VIC 3977	72-74 DEVON ROAD DEVON MEADOWS VIC 3977
79	VOLUME 06979 FOLIO 781	Lot 15 on Plan of Subdivision 007829	EWAZ ALI EQBALI of 37 GRENFELL RISE NARRE WARREN SOUTH VIC 3805	70 DEVON ROAD DEVON MEADOWS VIC 3977
80	VOLUME 09758 FOLIO 764	Lot 2 on Plan of Subdivision 207442E	BECKWITH MACBRO SANDS PTY LTD of 1 NORRIS STREET NORTH COBURG VIC 3058	40 DEVON ROAD DEVON MEADOWS VIC 3977
81	VOLUME 09758 FOLIO 763	Lot 1 on Plan of Subdivision 207442E	BECKWITH MACBRO SANDS PTY LTD of 1 NORRIS STREET NORTH COBURG VIC 3058	60 DEVON ROAD DEVON MEADOWS VIC 3977
82	VOLUME 09769 FOLIO 001	Land in Plan of Consolidation 165660L	FRONTLINK PTY LTD of 10 DOROTHY STREET DOVETON VIC 3177	1665 SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
83	VOLUME 09679 FOLIO 033	Lot 1 on Title Plan 107096B	FRIXOS THEODOULOU CHRISTOFOROU of 1715 SOUTH GIPPSLAD HY JUNCTION VILLAGE 3977	1715 SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
84	VOLUME 11822 FOLIO 977	Lot 1 on Plan of Subdivision 748479U	IAN KEITH CASTLES & HELEN CASTLES both of SOUTH GIPPSLAND HWY CRANBOURNE	1735 SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
85	VOLUME 11822 FOLIO 978	Reserve 1 on Plan of Subdivision 748479U	SOUTH EAST WATER CORPORATION of 20 CORPORATE DRIVE HEATHERTON VIC 3202	1745W SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
86	VOLUME 09630 FOLIO 984	VOLUME 09630 FOLIO 984	THIRTEENTH KANCHING NOMINEES PTY LTD of 39 WAREHAM ST SPRINGVALE	1765 SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
87	VOLUME 09679 FOLIO 029	Lot 1 on Title Plan 107092K	CRANBOURNE CHRISTIAN FELLOWSHIP CENTRE INC of 65 BERWICK-CRANBOURNE ROAD CRANBOURNE VIC 3977	CHURCH 1785 SOUTH GIPPSLAND HIGHWAY CRANBOURNE EAST VIC 3977
88	VOLUME 09630 FOLIO 992	Lot 1 on Title Plan 112759X	PETER JOHN TISDALE of 117 CENTRE ROAD LANGWARRIN VIC 3910 KEVIN JONES of 117 CENTRE ROAD LANGWARRIN VIC 3910 PAYNE SOLUTIONS PTY LTD of 15 WARFE DRIVE LAKE TYERS BEACH VIC 3909 KFJ MAINTENANCE PTY LTD of 1805 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978	1805 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
89	VOLUME 09728 FOLIO 023	Lot 2 on Plan of Subdivision 204989V	ANDREAS HAJIGEORGI of 1845 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978	1845 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
90	VOLUME 12353 FOLIO 464	Lot 1 on Title Plan 831390L	GALILEO FIVE WAYS NOMINEE PTY LTD of 15 LIME STREET SYDNEY NSW 2000	165 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
91	VOLUME 09765 FOLIO 603	Lot 2 on Plan of Subdivision 208239V	AMAZON INTERNATIONAL INVESTMENT CONSORTIUM PTY LTD of 53 REEMA BOULEVARD ENDEAVOUR HILLS VIC 3802	
92	VOLUME 09765 FOLIO 602	Lot 1 on Plan of Subdivision 208239V	BRADLEY JAMES GRIFFIN of 1925 SOUTH GIPPSLAND HY FIVE WAYS 3977	1925 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
93	VOLUME 09630 FOLIO 990	Lot 1 on Title Plan 102056R	THI KIM LOAN NGUYEN both of 44-48 ST HELENS CRESCENT NARRE WARREN NORTH VIC 3804	1945 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
94	VOLUME 08218 FOLIO 032	Lot 5 on Plan of Subdivision 034329	ALECK ARTHUR PAYDON & SARAH MAY MOLLER both of 1955 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978	1955 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
95	VOLUME 08975 FOLIO 877	Lot 8 on Plan of Subdivision 034329	ALECK ARTHUR PAYDON of 1965 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978 JOAN WINFRED PAYDON of 1965 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978	1965 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
96	VOLUME 08129 FOLIO 406	Lot 9 on Plan of Subdivision 034329	S & A STIPKOVIC INVESTMENTS PTY LTD of UNIT 2 310 WHITEHORSE ROAD BALWYN VIC 3103	1975 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
97	VOLUME 08942 FOLIO 740	Lot 1 on Plan of Subdivision 095723	RICIAN PTY LTD of 16 RAYMOND ROAD LAVERTON NORTH VIC 3026	
98	VOLUME 08942 FOLIO 741	Lot 2 on Plan of Subdivision 095723	PAUL PHILLIPS MANAGEMENT PTY LTD of 52 EARLSTON CIRCUIT CRANBOURNE VIC 3977	1995 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
99	VOLUME 08435 FOLIO 502	Lot 1 on Plan of Subdivision 057766	PAUL PHILLIPS MANAGEMENT PTY LTD of 52 EARLSTON CIRCUIT CRANBOURNE VIC 3977	2005 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
100	VOLUME 10602 FOLIO 679	Lot 2 on Plan of Subdivision 057766	NAVNEET PTY LTD of 7/315 BARRY RD. CAMPBELLFIELD 3061	2025 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978
101	VOLUME 08321 FOLIO 655	Lot 10 on Plan of Subdivision 034329	RENAE AMBER JOLLY of 5 HILL STREET RYE VIC 3941	55 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
102	VOLUME 08889 FOLIO 985	Lot 7 on Plan of Subdivision 034329	DANIEL RICHARD PRIDHAM & ALECK ARTHUR PAYDON both of 1965 SOUTH GIPPSLAND HIGHWAY CLYDE VIC 3978	75 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
103	VOLUME 08231 FOLIO 931	Lot 6 on Plan of Subdivision 034329	ZANTAP PTY LTD of 81 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978	81 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
104	VOLUME 08149 FOLIO 589	Lot 2 on Plan of Subdivision 034329	ZANI TAIPI of 81 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978	85 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
105	VOLUME 08457 FOLIO 262	Lot 1 on Plan of Subdivision 034329	AMAZON INTERNATIONAL INVESTMENT CONSORTIUM PTY LTD of 53 REEMA BOULEVARD ENDEAVOUR HILLS VIC 3802	
106	VOLUME 10469 FOLIO 543	Lot 2 on Plan of Subdivision 421555E	STEWART JOHN SQUIRES of 215 CLYDE-FIVEWAYS ROAD CLYDE VIC 3978	215 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
107	VOLUME 10469 FOLIO 542	Lot 1 on Plan of Subdivision 421555E	DALMONT BAY PTY LTD of 18-22 LEEMAK CRESCENT BERWICK VIC 3806	235 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
108	VOLUME 09948 FOLIO 965	Lot 2 on Plan of Subdivision 217828Y	NICOLA ZAPPIA of CLYDE FIVEWAYS RD CLYDE ROSARIO ZAPPIA of CLYDE FIVEWAYS RD CLYDE GIUSEPPE ZAPPIA of CLYDE FIVEWAYS RD CLYDE	251 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
109	VOLUME 09948 FOLIO 964	Lot 1 on Plan of Subdivision 217828Y	NICOLA ZAPPIA of CLYDE FIVEWAYS ROAD CLYDE 3978	245 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
110	VOLUME 09169 FOLIO 393	Lot 2 on Plan of Subdivision 118602	NICOLA ZAPPIA, ROSARIO ZAPPIA, JOSEPH ZAPPIA and MARIA ZAPPIA all of CLYDE-FIVEWAYS RD CLYDE 397	255 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
111	VOLUME 09169 FOLIO 394	Lot 3 on Plan of Subdivision 118602	SAMITHA RUKMAL SOMAWANSA & SAMANTHI DULITHA SOMAWANSA both of 6 WATERBLOOM AVENUE CLYDE NORTH VIC 3978 NALINDA PERANAMA BANDARA AMARASINGHE of 13 KINGS WOOD AVENUE MOUNT WAVERLEY VIC 3145 WICKRAMASINGHE MUDIYANSELAGE DEEPANI KARUNARATNE of 13 KINGSWOOD AVENUE MOUNT WAVERLEY VIC 3145	275 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
112	VOLUME 08747 FOLIO 085	Lot 2 on Plan of Subdivision 082427	JULIE MISKULIN of 51 CALLISTEMON CRESCENT NARRE WARREN VIC 3805	285 CLYDE-FIVE WAYS ROAD CLYDE VIC 3978
113	VOLUME 12210 FOLIO 021	Lot 1 on Plan of Subdivision 836534Y	LINDASE PTY LTD of 1365 WELLINGTON ROAD BELGRAVE SOUTH VIC 3160	1490 BALLARTO ROAD CLYDE VIC 3978
114	VOLUME 12210 FOLIO 022	Road R1 on Plan of Subdivision 836534Y	CASEY CITY COUNCIL of PATRICK NORTHEAST DRIVE NARRE WARREN VIC 3805	
115	VOLUME 08747 FOLIO 086	Lot 3 on Plan of Subdivision 082427	SOUTH EAST LAND CORP PTY LTD of 335 O'HERNS ROAD EPPING VIC 3076	1470 BALLARTO ROAD CLYDE VIC 3978
116	VOLUME 08309 FOLIO 576	Lot 1 on Plan of Subdivision 054058	BR 1450 BALLARTO PTY LTD of SUITE 3 2 BRANDON PARK DRIVE WHEELERS HILL VIC 3150	1450 BALLARTO ROAD CLYDE VIC 3978
117	VOLUME 09728 FOLIO 025	Lot 2 on Plan of Subdivision 205490D	BRANKO MARTIN SVENTEK & DIANE MAREE SVENTEK both of 66 WAVERLEY PARK DRIVE CRANBOURNE 3977	1430 BALLARTO ROAD CLYDE VIC 3978
118	VOLUME 09728 FOLIO 024	Lot 1 on Plan of Subdivision 205490D	LIMOVIP PTY LTD of 80 SOUTH GIPPSLAND HIGHWAY DANDENONG SOUTH VIC 3175	1410 BALLARTO ROAD CLYDE VIC 3978
119	VOLUME 08536 FOLIO 862	Lot 6 on Plan of Subdivision 066390	PAUL MAGIAS & CHRISTINA MARY MAGIAS both of 100 DEVON RD DEVON MEADOWS 3977 THOMAS PAUL NANAS & CATINA NANAS both of 14 BALLARTO RD CLYDE 3978	1370 BALLARTO ROAD CLYDE VIC 3978
120	VOLUME 08536 FOLIO 861	Lot 5 on Plan of Subdivision 066390	PALEOLOGOS MAGIAS & CHRISTINA MARY MAGIAS both of 1360 BALLARTO ROAD CRANBOURNE EAST VIC 3977 THOMAS PAUL NANAS & CATINA NANAS both of 1360 BALLARTO ROAD CRANBOURNE EAST VIC 3977	1360 BALLARTO ROAD CRANBOURNE EAST VIC 3977
121	VOLUME 08536 FOLIO 860	Lot 4 on Plan of Subdivision 066390	GLENDA JOY WILLIAMS of 1345 BALLARTO ROAD CRANBOURNE VIC 3977 JASON ALLAN WILLIAMS of 1345 BALLARTO ROAD CRANBOURNE VIC 3977 DAMIEN JOHN WILLIAMS of 212 PEARCEDALE ROAD CRANBOURNE SOUTH VIC 3977 CRAIG ANTHONY WILLIAMS of 138 DOVER STREET CREMORNE VIC 3121	1340 BALLARTO ROAD CRANBOURNE EAST VIC 3977

VERSION	AMENDMENT DESCRIPTION	DATE	APP'D
A	INITIAL RELEASE	28/11/22	AMM

N
W E
S
MGA94 ZONE55
0

SURVEY BY
SMEC
Member of the Surbana Jurong Group
TOWER 4, LEVEL 20, 727 COLLINS STREET
DOCKLANDS VIC 3008

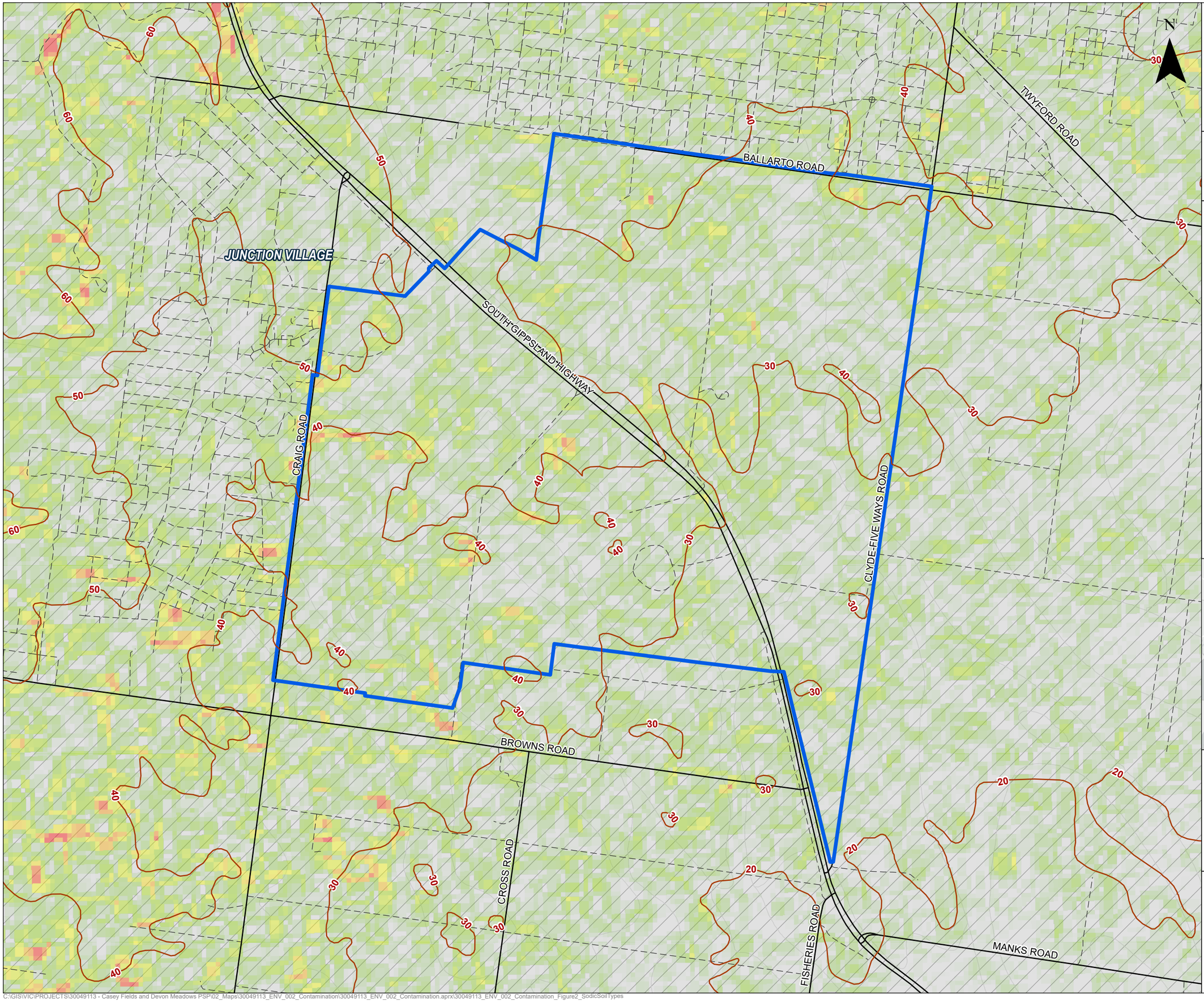
CLIENT
vpa Victorian Planning Authority

SURVEYOR		
DRAWN	S. BARNES	28/11/22
CHECKED	A. MACKENZIE	28/11/22
APPROVED	A. MACKENZIE	28/11/22

CASEY FIELDS AND DEVON MEADOWS PSP
CASEY CITY COUNCIL
TITLE COMPILATION PLAN

PROJECT/DRAWING NO. 30049113.01
SHEET NO. 2 OF 2
VERSION A

DWG PATH: C:\Users\Public\Temp\AcPublish_19212\30049113.01 Ver A.dwg PRINTED: 30/11/2022 at 12:23:48 PM



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 150 300 450 600
Meters

Scale:1:15,000 @ A3
GDA2020 MGA Zone 55

LEGEND

- Casey Fields and Devon Meadows PSP area
- Elevation contour (10m)
- Major road
- Minor road

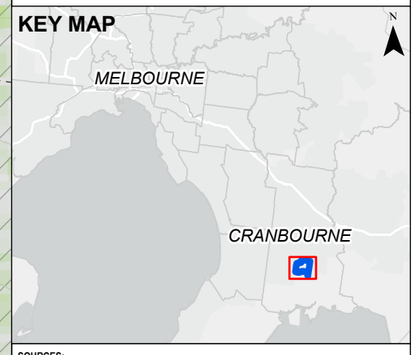
Approximate Sodic Soil Type (Upper Subsoil)

- Non-sodic (ESP <6%)

Relative Slope

- High
- Low

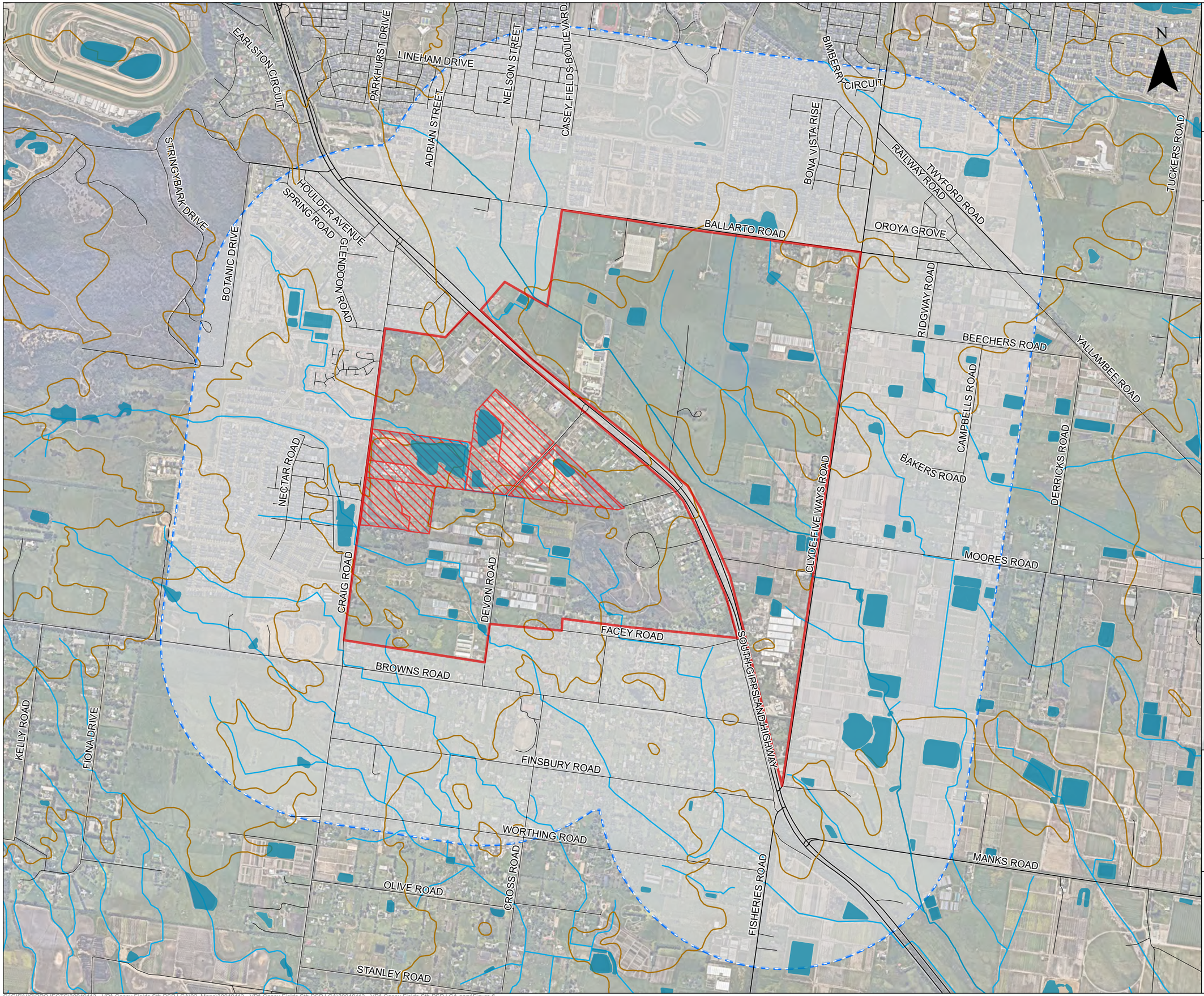
KEY MAP



SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © Light Gray Base: Vicmap, Esri, HERE, Garmin, FAO, NOAA, USGS

PROJECT:	VPA Casey Fields South / Devon Meadows Precinct
PROJECT NO:	30049113
FIGURE NO:	6
FIGURE TITLE:	Sodic Soil Types - Upper Subsoil
CREATED BY:	AP15941
DATE:	10/02/2023
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - Casey Fields and Devon Meadows PSP\02_Maps\30049113_ENV_002_Contamination\30049113_ENV_002_Contamination.aprx\30049113_ENV_002_Contamination_Figure2_SodicSoilTypes



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 210 420 630 840
Meters

Scale:1:19,000 @ A3
GDA2020 MGA Zone 55

LEGEND

- Site Boundary
- 1km Buffer
- Uncontrolled Fill
- Water Area
- Elevation Contours
- Major Road
- Minor Road
- Stream

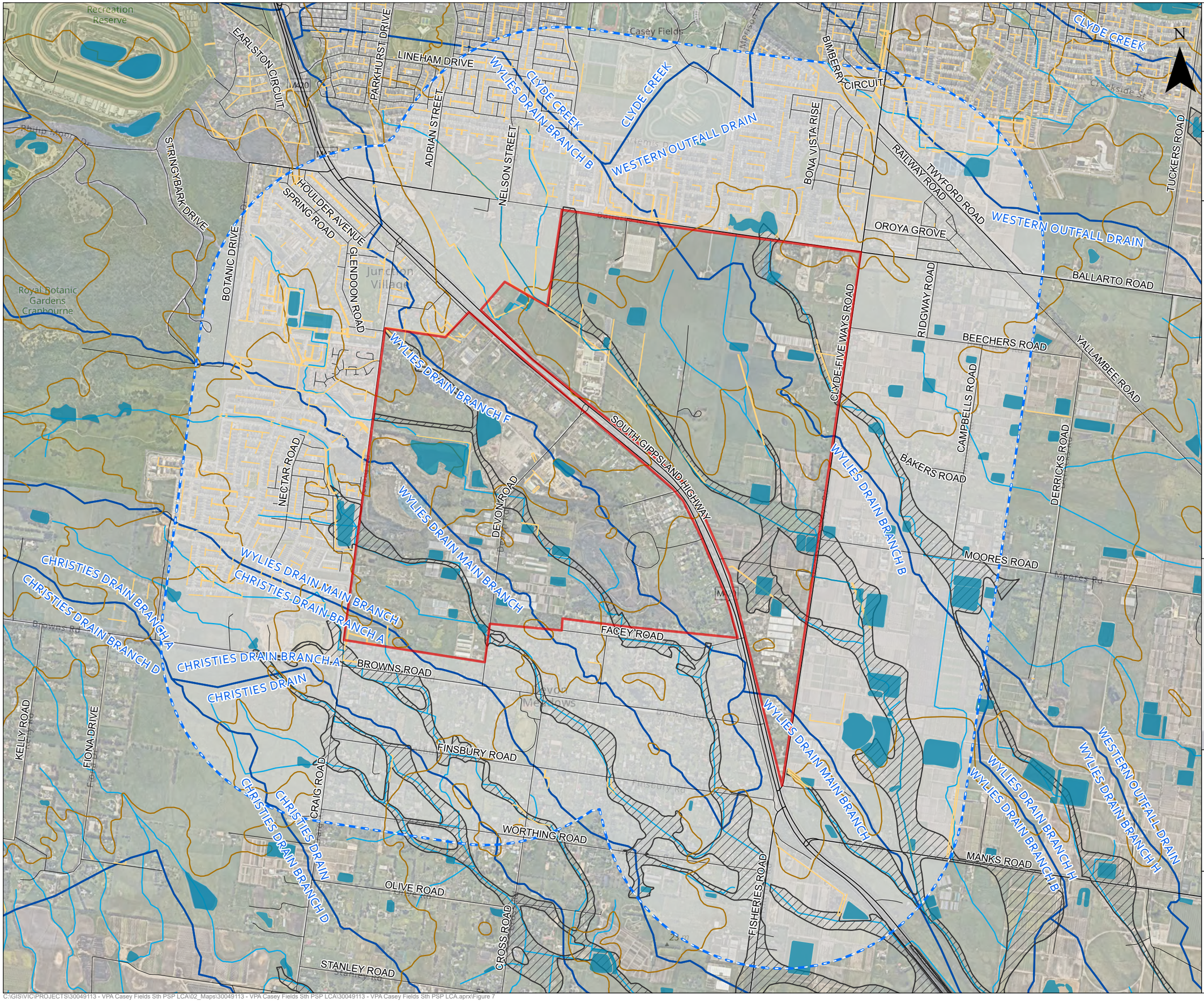
KEY MAP

SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © World Light Gray Reference: Esri, HERE
World Light Gray Canvas Base: Esri, HERE, Garmin, USGS
Nearmap WMS Server:

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, this map contains data from a number of sources - no warranty is given that the information contained on this is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of all information prior to using it. This map is not a design document.

PROJECT:	VPA Casey Fields Sth PSP LCA
PROJECT NO:	30049113
FIGURE NO:	7
FIGURE TITLE:	Geotechnical Risks
CREATED BY:	JZ15939
DATE:	20/12/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - VPA Casey Fields Sth PSP LCA\02_Maps\30049113 - VPA Casey Fields Sth PSP LCA\30049113 - VPA Casey Fields Sth PSP LCA.aprx\Figure 6



SMEC

Member of the Surbana Jurong Group

SMEC AUSTRALIA PTY LTD
ABN 47 065 475 149

0 210 420 630 840
Meters

Scale:1:19,000 @ A3
GDA2020 MGA Zone 55

LEGEND

- Site Boundary
- 1km Buffer
- Land Subject to Inundation Overlay
- MWC Catchment Boundary
- Water Area
- Easements
- Elevation Contours
- Stream
- Major Road
- Minor Road

KEY MAP

SOURCES:
1. Roads and Waterways © DELWP 2022
2. Basemap © World Topographic Map: Vicmap, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS
World Light Gray Reference: Esri, HERE
World Hillshade: Esri, Geoscience Australia, NASA, NGA, USGS
World Light Gray Canvas Base: Esri, HERE, Garmin, USGS
Nearmap WMS Server:

Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, this map contains data from a number of sources - no warranty is given that the information contained on this is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of all information prior to using it. This map is not a design document.

PROJECT:	VPA Casey Fields Sth PSP LCA
PROJECT NO:	30049113
FIGURE NO:	8
FIGURE TITLE:	Hydrological Risks
CREATED BY:	JZ15939
DATE:	20/12/2022
VERSION:	1

C:\GIS\VIC\PROJECTS\30049113 - VPA Casey Fields Sth PSP LCA\02_Maps\30049113 - VPA Casey Fields Sth PSP LCA\30049113 - VPA Casey Fields Sth PSP LCA.aprx\Figure 7

Appendix B – Adverse Amenity summary desktop assessment

Table 11-1 Summary of locations within PSP and buffer region with potential adverse amenity

Address and Location	Potential Affected Amenity (Noise, Air Quality, Visual)	Description	Information Source
PJ Communications PTY LTD. 17 Finsbury Road, Devon Meadows	Noise, Air Quality, Visual	Transport of prescribed industrial waste	Lotsearch®
LMF Transport PTY LTD. 16 Railway Road, Clyde	Noise, Air Quality, Visual	Transport of prescribed industrial waste	Lotsearch®
50 Worthing Road, Clyde	Air Quality	Have a current EPA works approval for sewage treatment.	Lotsearch®
7-11 Petrol station 2025 South Gippsland Highway, Clyde (Corner Clyde-Five Ways Road and South Gippsland Highway)	Noise, Air Quality	Operational Liquid Fuel Facility	Lotsearch®
TGS Industrial Sands. 60 Devon Road, Devon Meadows	Noise	Former pollution abatement notice issued for noise at on 14 October 2015. Notice No:90006413.	Lotsearch®
BP Service Station. 1490 Ballarto Road, Clyde	Noise, Air Quality	Operational Liquid Fuel Facility	Google Earth Review
Cartage Australia 35 Devon Road, Devon Meadows	Noise	Transportation Service	Google Earth Review
Halit Flowers 95 Devon Road, Devon Meadows	Noise, Visual	Wholesale Florist	Google Earth Review
J&E Wholesale Flowers 105 Devon Road, Devon Meadows	Noise, Visual	Wholesale Florist	Google Earth Review
J&Y Healey PTY 85 Devon Road, Devon Meadows	Noise, Air Quality	Florist	Google Earth Review
Buncha Flowers 1360 Ballarto Road, Clyde	Noise, Air Quality	Plant Nursery	Google Earth Review
South Gippsland Eggs 100 Devon Road, Devon Meadows	Noise, Air Quality	Farm	Google Earth Review
D'Alberto Egg Farm 135 Devon Road, Devon Meadows	Noise, Air Quality	Farm	Google Earth Review
Metro Industrial Sands 60 Devon Road, Devon Meadows	Noise, Air Quality, Visual	Mining Company	Google Earth Review
Gary Mac's Cranbourne Wreckers 1790 South Gippsland Highway, Devon Meadows	Noise, Visual	Auto Wrecker	Google Earth Review
Aurora Construction Materials ACM Clyde 1470 Ballarto Road, Clyde	Noise, Air quality	Concrete supplier	Google Earth Review

Address and Location	Potential Affected Amenity (Noise, Air Quality, Visual)	Description	Information Source
Clyde CFA 17 Railway Road, Clyde	Noise	Fire Station	Google Earth Review
Schreurs & Sons 30 Twyford Road, Clyde	Noise, Air Quality, Visual	Farm	Google Earth Review
Faceys Nursery Pty Ltd 1870 South Gippsland Highway, Devon Meadows	Noise, Air Quality	Plant Nursery	Google Earth Review
Bashkimi Flowers, 85 Clyde-Five Ways Road, Clyde	Noise, Air Quality	Plant Nursery	Google Earth Review
Golden nursery 1945 South Gippsland highway, Clyde	Noise, Air Quality	Plant Nursery	Google Earth Review
Clear view commercial glass 1925 South Gippsland Highway, Clyde	Noise, Air Quality	Glass Merchant	Google Earth Review
LJ Kitchen 90 Clyde-Five Ways Road, Clyde	Noise, Air quality	Cabinet Maker	Google Earth Review
E.E. Muir and Sons 1985 South Gippsland Highway, Clyde	Noise, Air Quality	Agrochemicals Supplier	Google Earth Review
125 - 133 Devon Road, Devon Meadows	Noise, Air Quality, Visual	Agricultural Farm	Google Earth Review
73 Worthing Road, Clyde	Noise, Air Quality, Visual	Agricultural Farm	Google Earth Review
Limnos Poultry 109-111 Craig Road, Devon Meadows	Noise, Air Quality, Visual	Poultry Store	Google Earth Review
Nunkeri Stables 111 Craig Road	Noise	Horse Riding School	Google Earth Review
Devon Meadows Fire Station 51/53 Finsbury Road, Devon Meadows	Noise	Fire Station	Google Earth Review
Corrigan L&M 71 Fisheries Road, Devon Meadows	Noise, Air Quality	Agricultural farm	Google Earth Review
B&E flowers 75 Fisheries Road, Devon Meadows	Noise, Air Quality	Flower Farm	Google Earth Review
Crop Wise Fertilisers Pty 40 Moores Road, Clyde	Noise, Air Quality	Fertiliser Supplier	Google Earth Review
Caseys Top Catz Boarding Cattery 34 Bakers Road, Clyde	Noise	Cattery	Google Earth Review
Growing chickens Campbells Road, Clyde	Noise, Air Quality	Poultry farm	Google Earth Review
Fresh Leaf Farms Limited 30 Clyde-Five Ways RoadClyde	Noise, Air Quality, Visual	Agricultural land	Google Earth Review
Plantex Nursery 110 Campbells Road, Clyde	Noise, Air Quality	Wholesale Plant Nursery	Google Earth Review

Address and Location	Potential Affected Amenity (Noise, Air Quality, Visual)	Description	Information Source
Casey BMX club 160 Berwick-Cranbourne Road, Cranbourne East	Noise, Air Quality	BMX Club	Google Earth Review
7-Eleven Petrol Station Cranbourne south 1240 Ballarto Road, Clyde	Noise, Air Quality, Visual	Operational Liquid Fuel Facility	Google Earth Review
South Gippsland Highway	Noise	Major Road	Google Earth Review

Appendix C – Site inspections

SMEC conducted a drive-over tour on public roads through the CFS and DM PSP and undertook closer inspections on foot using public road reserves and public open spaces. Access to private properties was only undertaken by SMEC field staff with permission of owners/occupiers of properties.

Fifty-three sites within the CFS and DM PSP were assessed for odour, fume, gas/fuel/rubber smells, smoke, dust, steam, noise, vibration and other potential aesthetic impacts (e.g. litter). The weather conditions were also recorded. These observations are summarised in Table 11-2 below. Properties of interest were examined from roadways and publicly accessible areas.

Table 11-2: Properties inspected

Site Summary and observation	Weather Conditions
LMF Transport PTY LTD, 16 Railway Road, Clyde • Transport of prescribed industrial waste • The property consisted of an old-looking house and yard • There is potential for asbestos-containing material in the house • A bottle of coolant was sighted on the porch • A transient, subtle sulphuric odour was observed on the breeze • Distant traffic noise and bird sound was heard	• Time and date of property inspection: 23/11/22 - 9:50 am to 10:00 am • Cloudy • Wind: 15 km/hr (weatherZone) • Wind direction: west (weatherZone) • Temperature: approximately 14.7 °C (weatherZone)
Eastern Treatment Plan Dual Pipe Scheme (849m North East of PSP) • Site subject to EPA Audit • The site inspected was on the roadside of Ballarto Road, between Tucker's Road and Bells Road • An Eastern Irrigation Scheme marker and drain were observed • The ground surface surrounding the drain was significantly wetter than on the opposite side of the road • A resident said that there 'may be a leak in the main pipeline'	• Time and date of property inspection: 28/11/22 - 9:26am to 9:35 am • Cloudy but sunny • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 13.0 °C (weatherZone)
Buncha Flowers, 1360 Ballarto Road, Devon Meadows • potentially contaminated due to current and historic use as a market garden and flower farm, down gradient to a chicken broiler. • Plastic and paper litter was sighted outside the site entrance • Distant traffic noise, bird noises, and frog noises from Sapphire Estate opposite the property • A faint organic odour was observed • Vehicle traffic on Ballarto Road outside the property was observed to suspend dust from the gravel surface • The traffic volume was low outside the property	• Time and date of property inspection: 23/11/22 - 10:20am to 10:30 am • cloudy • Wind: 9 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 15 °C (weatherZone)

Site Summary and observation	Weather Conditions
1370 Ballarto Road, Clyde • potentially contaminated due to current and historic use as a market garden and flower farm, down gradient to a chicken broiler.	• No Access to site. The site is through Buncha Flowers (1360 Ballarto Road), which is accessed via appointment only. Buncha Flowers was contacted via phone but did not return calls.
Aurora Construction Materials ACM Clyde, 1470 Ballarto Road, Clyde • former agricultural activities and market gardens, septic tank onsite, current concrete batching plant and landscape gardening and trade supplies. • Rusted temporary construction-style fencing, weeds, and gravel were observed at the site entrance • Large mounds overgrown with vegetation were observed – these could be contaminated soil stockpiles • Small pieces of plastic, paper, wood, and foam rubbish observed • A dead pigeon was sighted on the ground outside the site entrance • Moderate noise from onsite machinery, low traffic noise. The majority of traffic vehicles observed were trucks entering the site • A subtle cement odour was observed • Dust was observed at the site entrance, from traffic on the gravel ground	• Time and date of property inspection: 23/11/22 - 10:05am to 10:10 am • cloudy • Wind: 15 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)
BP Service Station, 1490 Ballarto Road, Clyde • Historic market gardens, currently a BP petrol station. • A garbage-like, slightly sulphuric odour was observed on the breeze, slightly sulphuric smelling • A subtle petrol odour was observed • Low-moderate traffic noise. Bird noise	• Time and date of property inspection: 23/11/22 - 10:00am to 10:05 am • cloudy • Wind: 11 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 115.3 °C (weatherZone)
1591 South Gippsland Highway (877m North West of PSP) • Site subject to EPA Audit • A house, truck, and sheds were observed onsite • Overgrown vegetation and a stockpile of gravel, concrete, and rubbish were noted in the front yard • A pile of dumped rubbish was sighted beside the house • Loud traffic noise on South Gippsland Highway • A frequent petrol exhaust odour was observed from vehicles on South Gippsland Highway • Vehicles on the gravel road adjacent the property were observed to suspend dust when driving over the gravel	• Time and date of property inspection: 28/11/22 – 11:52am to 12:00pm • Scattered clouds, sunny • Wind: 13 km/hr • Wind direction: WNW • Temperature: 14.9 °C (weatherZone)

Site Summary and observation	Weather Conditions
1715 South Gippsland Highway, Clyde • potentially occurring agricultural activities (i.e. market gardening). Agricultural gazing, market gardens/agricultural cropping with farmhouse and large dam. • The site appeared to be a residential house and farm on a gated property • Overgrown vegetation was observed outside the gates of the property and in fields on either side of the house • Pale brown puddles were observed in the driveway • Loud traffic noise was heard from South Gippsland Highway • No signs of contamination were identified	• Time and date of property inspection: 28/11/22 - 13:15pm to 13:25pm • Overcast • Wind: 15 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)
1780 South Gippsland Highway, Devon Meadows • Site subject to EPA Audit • The site is currently operating as a church • The gardens surrounding the church appeared landscaped and well-maintained. • Next door to the site was an overgrown paddock containing freight containers • A small excavator was digging soil from the garden bed at the time of the inspection • A dumpster overflowing with garbage bags, and pest control bait boxes were observed • Moderate-high traffic noise on South Gippsland Highway was heard • A frequent fertiliser-like odour (possibly from active earthworks) was observed	• Time and date of property inspection: 28/11/22 - 12:54pm to 1:00pm • Overcast • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)
7-11 Petrol station, 2025 South Gippsland Highway, Clyde *(Corner Clyde-Five Ways Road and South Gippsland highway)* • Petrol station • A subtle, frequent petrol odour was observed. • Loud traffic on Clyde-Five Ways Road and South Gippsland Highway was heard. • A deteriorated car tyre was noted in a garden bed. • The façade of the pumping area appeared rotten/mouldy. • Pest control bait was observed at the side of the petrol station building.	• Time and date of property inspection: 23/11/22 - 15:20Pm to 15:30Pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 15,1 °C (weatherZone)
165 Clyde-Five Ways Road, Clyde • Potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed.	• Time and date of property inspection: 28/11/22 - 10:00am to 10:10am • Cloudy but sunny

Site Summary and observation	Weather Conditions
• The site was noted to contain an abandoned house, old machinery, a shed, and crop fields. • Multiple piles of dumped rubbish including wooden pellets, clothes, and rotting celery were observed. • An abandoned car and a rusty tractor were sighted. • A tap from a water tank was observed to be leaking. • Containers labelled herbicide, insecticide, fungicide, and oat bait for rabbits were noted in the farm shed. Chlorine containers were sighted on the ground by the crop field. • Moderate-high traffic noise from Clyde-Five Ways Road, bird sound, and running water from the water tank leaking tap were heard. • A subtle paint-like odour was observed in the farm shed.	• Wind: 13 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 13.9 °C (weatherZone)
215 Clyde-Five Ways Road, Clyde • potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. • A farmhouse and stables were noted onsite. No animals were observed onsite. • A rusty tractor, dumped wood, and corrugated iron were sighted. • Low-moderate traffic noise from Clyde-Five Ways Road, and bird sound was heard. • A subtle hay/organic odour was observed.	• Time and date of property inspection: 28/11/22 - 11:51am to 12:00am • Cloudy but sunny • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)
235 Clyde-Five Ways Road, Clyde • potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. • Two farm sheds and a house were observed onsite. • Three freight containers, large concrete pipe segments, patches of brown vegetation, and a pile of wood • Moderate traffic noise and bird sounds were heard. The volume of traffic at the time of inspection was low. • A frequent hay-like odour was observed.	• Time and date of property inspection: 28/11/22 - 10:58am to 10:05am • Cloudy but sunny • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 15.7 °C (weatherZone)
245 Clyde-Five Ways Road, Clyde • Potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. • White greenhouses, one of which had a broken roof, were observed onsite. • Rusty farm machinery, a stockpile of gravel, broken tubing, and dumped rubbish (wood, plastic, concrete pipes) were noted. • Low distant traffic noise and a moderate hum of machinery were heard.	• Time and date of property inspection: 28/11/22 - 11:08am to 11:15am • Cloudy but sunny • Wind: 19 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)

Site Summary and observation	Weather Conditions
• A frequent organic odour was observed near the greenhouses.	
251 Clyde-Five Ways Road, Clyde • potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. • Old water tanks and plastic crates observed onsite • Dumped containers and wooden pellets at front of property • Corrugated iron fencing and rusty building façade • Moderate traffic noise from Clyde-Five Ways Road	• Time and date of property inspection: 23/11/22 – 4:17pm – 4:26pm • Overcast • Wind: 6 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 15.1 °C (weatherZone)
255 Clyde-Five Ways Road, Clyde • Potentially contaminated due to historic use for agricultural grazing, market gardens, farm machinery shed. • A house and sheds were sighted on the property. Fields were observed on either side of the residence. • Wood piles and rusted corrugated iron were noted in the shed • Moderate traffic noise was heard, but few vehicles were on Clyde-Five Ways Road during the inspection	• Time and date of property inspection: 28/11/22 - 11:34am to 11:45am • Sunny, scattered clouds • Wind: 15 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 15.3 °C (weatherZone)
42 Craig Road, Devon Meadows • A stockpile of tyres on exposed soil, and upside-down swimming pools • A crane was operating onsite at the time of the inspection • Rubbish (plastic, foam, paper, liquid containers, fabric) and fallen metal temporary construction-style fencing was observed on the ground • Deep puddles were observed on the ground surface near Craig Road • A portion of the site was fenced off with metal temporary construction-style fencing • The site contained old cars, piping, water tanks, dumped rubbish, freight containers, metal poles, and tubing • Loud traffic noise was heard from Craig Road	• Time and date of property inspection: 23/11/22 - 10:58am to 11:05am • Overcast, showers • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.4 °C (weatherZone)
Forest area within State Dandenong Forest Management Area (891m West of PSP) • Site subject to EPA Audit • The site inspected was Stringy Bark Picnic Area and its surrounds • The area has dense native vegetation and is well-maintained • Some litter (tissues, wipes, part of a licence plate) was noted on the ground	• Time and date of property inspection: 28/11/22 - 14:26pm to 14:36pm • Sunny, scattered clouds • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone)

Site Summary and observation	Weather Conditions
• Low noise of leaves rustling, bird sounds, and chirping/buzzing of insects were observed.	• Temperature: approximately 16.7 °C (weatherZone)
Clyde CFA, 17 Railway Road, Clyde • Fire Station • A brick building and a brick barbeque area were noted on site • Dumped rubbish was observed onsite, including chairs, corrugated iron, broken whitegoods, and plastic sheeting • A large concrete pipe was observed in the bushland behind the CFA building • Distant traffic noise and bird noise were heard	• Time and date of property inspection: 23/11/22 - 9:40am to 9:50am • Cloudy • Wind: 9 km/hr (weatherZone) • Wind direction: West(weatherZone) • Temperature: approximately 14.2 °C (weatherZone)
PJ Communications PTY LTD, 17 Finsbury Road, Devon Meadows • Transport of prescribed industrial waste • The site appeared to be a residential property • 'Trespassers Prosecuted. Video Surveillance' sign and temporary construction-style metal fencing were observed. • Dumped rubbish was noted in the front yard of the property. • Sheep and goats were observed onsite • A subtle, frequent organic odour was observed. • The site was quiet at the time of inspection. Sheep noise was noted.	• Time and date of property inspection: 23/11/22 - 12:44pm to 12:54pm • Overcast • Wind: 6 km/hr (weatherZone) • Wind direction: West(weatherZone) • Temperature: approximately 14.1 °C (weatherZone)
50 Worthing Road, Clyde • Current EPA works approval for sewage treatment • The site is operating as Devon Meadows Primary School. • The site was quiet at the time of inspection. Bird sound was noted. • No indicators of contamination were observed.	• Time of property inspection: 13:08Pm to 13:15Pm • Overcast • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 15 °C (weatherZone)
Cartage Australia 35 Devon Road, Devon Meadows • Transportation service of bulk raw materials • Several trucks and freight containers were noted on site. • A subtle sweet organic smell was observed. • Low-moderately noisy machinery was heard from the soil yard next door. • Low traffic noise was heard from Devon Road. • Stockpiles of soil were observed in the yard.	• Time and date of property inspection: 23/11/22 - 12:03pm to 12:10pm • cloudy • Wind: 11 km/hr (weatherZone) • Wind direction: NW(weatherZone) • Temperature: approximately 16 °C (weatherZone)

Site Summary and observation	Weather Conditions
J & E Wholesale Flowers 105 Devon Road, Devon Meadows • A residential house, shed, carport and site shed 'Office' were observed onsite. • A frequent odour of sweet fertiliser was noted on the breeze. • Dumped rubbish was observed next door. • The site was noted to be quiet at the time of inspection.	• Time and date of property inspection: 23/11/22 - 12:28pm to 12:38pm • cloudy • Wind: 7 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)
Halit Flowers, 95 Devon Road, Devon Meadows • Wholesale florist • A large metal shed, smaller sheds, trucks, and cars were observed onsite. • The site is signed as a biosecurity area. • Low-volume machinery noise was heard. • No indicators of contamination were observed.	• Time and date of property inspection: 23/11/22 - 11:39am to 11:50am • Overcast • Wind: 4 km/hr (weatherZone) • Wind direction: SW (weatherZone) • Temperature: approximately 16.2 °C (weatherZone)
J & Y Healey PTY, 85 Devon Road, Devon Meadows • Florist • Stockpiles of tanbark, wood, and wire, and hay bales were observed at the front of the property. • A subtle organic odour was noted onsite. • Faded dirty greenhouses and wooden pallets were observed. • Low machinery noise and traffic noise were heard.	• Time and date of property inspection: 23/11/22 - 12:35pm to 12:40pm • Overcast • Wind: 15 km/hr (weatherZone) • Wind direction: NW(weatherZone) • Temperature: approximately 15.1 °C (weatherZone)
South Gippsland Eggs 100 Devon Road, Devon Meadows • The site is a chicken farm. One free-range chicken was observed in the front field. • Low traffic noise was heard onsite. • A subtle farm/hay odour was noted. • Plastic and paper litter was observed at the site entrance.	• Time and date of property inspection: 23/11/22 - 11:44am to 11:50am • Overcast • Wind: 4 km/hr (weatherZone) • Wind direction: SW (weatherZone) • Temperature: approximately 16.2 °C (weatherZone)
Casey BMX Club, 160 Berwick-Cranbourne Road, Cranbourne East • The site is operating as a BMX Club within a recreational sporting precinct. • A brick building, fenced bin area, liquid containers, water tanks, and an empty freight container were observed onsite.	• Time and date of property inspection: 28/11/22 - 09:00am to 09:10am • Cloudy but sunny • Wind: 11 km/hr (weatherZone)

Site Summary and observation	Weather Conditions
• One liquid container and three drums marked 'dust control concentrate' were observed. • Plastic and paper litter was observed in the garden beds. • A disassembled refridgerator was sighted within the fenced bin area. • Geofabric was observed above the soil surface in the garden bed. • A stockpile of gravel and a stockpile of sand were noted onsite.	• Wind direction: WNW(weatherZone) • Temperature: approximately 13.1 °C (weatherZone)
D'Alberto Egg Farm, 135 Devon Road, Devon Meadows • The site is a chicken farm consisting of sheds and brick buildings. • The area beyond the entry gates is signed as a quarantine area. • Metal sheeting was observed at the site entrance. • Moderate traffic noise from a distant road was heard. • A subtle hay/farm odour was noted.	• Time and date of property inspection: 23/11/22 - 11:20am to 11:30am • Overcast • Wind: 7 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 14.4 °C (weatherZone)
Metro Industrial Sands and TGS Industrial Sands, 60 Devon Road, Devon Meadows • Metro Industrial Sands: Mining company • TGS Industrial Sands: Former pollution abatement notice issued for noise on 14 October 2015. Notice No: 90006413 • The façades of buildings on site appeared to be rusty. • Stockpiles of gravel were observed at the site entrance. • Piles of rusted metal machinery parts were noted. • A moderate-strong organic/fertiliser/manure odour was observed. • Moderate machinery noise, bird noise, loud beeping of trucks on Devon Road	• Time and date of property inspection: 23/11/22 - 11:05am to 11:15am • Overcast • Wind: 11 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 14.5 °C (weatherZone)
Gary Mac's Cranbourne Wreckers, 1790 South Gippsland Highway, Devon Meadows • The site is operating as an auto wrecker. • Sheds, cars, and piles of tyres are present onsite. • Weeds and dead vegetation were noted at the site entrance. • The grass inside the property was observed to be overgrown. • Moderate traffic noise on South Gippsland Highway was heard.	• Time and date of property inspection: 28/11/22 - 12:45Pm to 12:55Pm • Cloudy • Wind: 9 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 14.9 °C (weatherZone)

Site Summary and observation	Weather Conditions
Schreurs & Sons, 30 Twyford Road, Clyde • The site is a residential townhouse development under construction (Soho Living Project). • Construction works were active at the time of inspection. • Plastic litter and building materials were observed on the ground. • Low-moderate traffic and construction noise was heard.	• Time and date of property inspection: 28/11/22 – 9:27 am to 9:37 am • Cloudy • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 13 °C (weatherZone)
Faceys Nursery Pty Ltd, 1870 South Gippsland Highway, , Devon Meadows • Plant nursery • Sheds, a residential house, water tanks and white greenhouses were observed onsite. • Farm machinery towers were sighted next door. • Moderately loud traffic from South Gippsland Highway and bird noises were heard. • No signs of contamination were observed.	• Time and date of property inspection: 28/11/22 – 12:33pm to 12:43pm • Cloudy • Wind: 11 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 15.1 °C (weatherZone)
Bashkimi Flowers, 85 Clyde – Five Ways Road, Clyde • Plant nursery • White greenhouses and flower fields were observed onsite • Moderately loud traffic on Clyde-Five Ways Road was heard • A faint fertiliser odour was observed on the breeze	• Time and date of property inspection: 28/11/22 – 10:29am to 10:35am • Cloudy but sunny • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.3 °C (weatherZone)
Golden Nursery, 1945 South Gippsland Highway, Clyde • Plant nursery • A pile of boulders, stockpiles of gravel, metal sheets, and broken plant pots were observed onsite • Moderate-loud traffic noise and bird noise were heard	• Time and date of property inspection: 28/11/22 – 12:18pm to 12:25pm • Sunny, scattered clouds • Wind: 13 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.8 °C (weatherZone)
Clear View Commercial Glass, 1925 South Gippsland Highway, Clyde • Glass merchant • Trees, a shed, and a rusted metal rack were observed at the site entrance	• Time and date of property inspection: 28/11/22 – 12:07pm to 12:15pm • Sunny, scattered clouds

Site Summary and observation	Weather Conditions
• Moderately loud traffic on South Gippsland Highway was heard. • No signs of contamination were observed.	• Wind: 9 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 14.8 °C (weatherZone)
LJ Kitchen, 90 Clyde-Five Ways Road, Clyde • Cabinet maker • The building on site appeared to be a residential house • Loud traffic noise was heard. Traffic on Clyde-Five Ways Road was busy at the time of the inspection.	• Time and date of property inspection: 23/11/22 – 03:30pm to 03:35pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 14.7 °C (weatherZone)
E.E. Muir and Sons, 1985 South Gippsland Highway, Clyde • In 1972 the site requested to manufacture pallets and store sawdust. There may have been use or storage of chemicals to treat timber during this time. • Agrochemicals supplier • Drums/containers were observed onsite. They appeared to be clean and were labelled for recycling. • Moderate-high traffic noise from South Gippsland Highway was heard. • Site staff said that non-chemical fertilisers are stored onsite.	• Time and date of property inspection: 23/11/22 – 02:18pm to 02:25pm • cloudy • Wind: 6 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 13.7 °C (weatherZone)
73 Worthing Road, Devon Meadows • Agricultural farm • The site appeared to be of residential use. • A pile of rocks was observed at the site entrance • A large concrete pipe was noted in the front garden of the property. • Quiet distant traffic noise and beeping machinery were heard.	• Time and date of property inspection: 23/11/22 – 01:23pm to 01:30pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.5 °C (weatherZone)
Nunkeri Stables, 111 Craig Road, Devon Meadows • Horse riding school • Rusted steel drums, dumped rubbish (corrugated iron, pipes), piles of wood, and old machinery were observed onsite. • Low traffic noise was heard at the site entrance, but it was noted to be quiet at the stables.	• Time and date of property inspection: 23/11/22 – 02:00pm to 02:15pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: WNW (weatherZone)

Site Summary and observation	Weather Conditions
	• Temperature: approximately 13.5 °C (weatherZone)
Devon Meadows Fire Station, 47-49 Finsbury Road, Devon Meadows • Fire station • A brown brick building was observed onsite. • Low-medium distant traffic noise and bird sounds were heard.	• Time and date of property inspection: 23/11/22 – 12:57pm to 01:05pm • Overcast • Wind: 7 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 14.6 °C (weatherZone)
Corrigan L&M, 71 Fisheries Road, Devon Meadows • Agricultural farm • A farmhouse, a shed, and a sheep paddock were observed on site. • Loud traffic noise on Fisheries Road and bird noises were heard. • A frequent organic manure-like odour was observed. • The site is next door to B&E Flowers.	• Time and date of property inspection: 28/11/22 – 01:43pm to 01:50pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: West (weatherZone) • Temperature: approximately 15.2 °C (weatherZone)
B&E Flowers, 75 Fisheries Road, Devon Meadows • Flower farm • White greenhouses were observed on site. • Moderate traffic noise was heard. • Faint odours of exhaust fumes and an organic odour were observed.	• Time and date of property inspection: 23/11/22 – 01:32pm to 01:40pm • Overcast • Wind: 6 km/hr (weatherZone) • Wind direction: NW (weatherZone) • Temperature: approximately 14.7 °C (weatherZone)
Crop Wise Fertilisers Pty, 40 Moores Road, Clyde • Fertiliser supplier • Piles of soil and dumped rubbish (wooden pellets, corrugated iron, rusty drum) were observed onsite. • A dumpster full of plastic, fabric, and wooden rubbish, and a tyre were observed onsite • Active excavators were observed in the adjacent site. • Faint traffic noise, bird sounds, and low beeping from machinery were heard • A strong odour of fertiliser/manure was observed.	• Time and date of property inspection: 28/11/22 – 10:18am to 10:25am • Cloudy • Wind: 9 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 15 °C (weatherZone)

Site Summary and observation	Weather Conditions
• Dust was observed, suspended from vehicles driving on the gravel road (Moores Road).	
Caseys Top Catz Boarding Cattery, 34 Bakers Road, Clyde • Cattery • A residential house was observed onsite. • A freight container, gas cylinders, a pile of wood, and an upside-down bathtub were noted. • Moderate, distant traffic noise was heard • A frequent manure odour was observed near the farm next door.	• Time and date of property inspection: 23/11/22 – 03:48pm to 03:55pm • cloudy • Wind: 9 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 13.9 °C (weatherZone)
Growing Chickens Campbells Road, Clyde • Poultry farm. No signs of poultry production were observed during the site inspection. • Crop fields and a residential house were observed onsite. A 'Wood Yard' sign pointed to the property next door. • Gas cylinders and an oil drum were observed beside the house. • Distant traffic noise, bird sounds, and a dog barking were heard. • Frequent organic compost/fertiliser/soil-like odours were observed	• Time and date of property inspection: 28/11/22 – 09:57am to 10:05am • Sunny, scattered clouds • Wind: 6 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.5 °C (weatherZone)
Fresh Leaf Farms Limited, 30 Clyde Five-Ways Road, Clyde • Agricultural land • Litter (wood, plastic) was observed in the garden beds. • A rusty drum labelled 'Heating Oil' and a portaloo were noted onsite. • Low machinery noise was heard. • A frequent herb scent was observed within the facility. • A faint truck exhaust odour was observed outdoors.	• Time and date of property inspection: 23/11/22 – 02:32pm to 02:40pm • Overcast • Wind: 7 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 14.2 °C (weatherZone) •
Plantex Nursery, 110 Campbells Road, Clyde • Wholesale plant nursery • A residential house, greenhouses, and sheds were noted onsite. • Low tractor noise and distant traffic noise were observed. • A frequent odour of cut grass was observed onsite, and a strong organic odour was observed near the wet ground.	• Time and date of property inspection: 23/11/22 – 04:06pm to 04:15pm • Overcast • Wind: 4 km/hr (weatherZone) • Wind direction: WNW (weatherZone) • Temperature: approximately 14.3 °C (weatherZone)

Site Summary and observation	Weather Conditions
7-Eleven Petrol Station Cranbourne South, 1240 Ballarto Road, Clyde • Operational liquid fuel facility • Litter (glass bottles, paper, plastic, and metal cans) was observed in the garden beds on site. • Loud traffic noise was heard from vehicles on Ballarto Road.	• Time and date of property inspection: 23/11/22 – 10:43am to 10:50am • Overcast • Wind: 17 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 14 °C (weatherZone)
South Gippsland Highway • Major road • Weeds were sighted in the centre island of the road. • Plastic litter was observed on the side of the road. • Loud traffic noise was heard from cars and trucks on the highway • A subtle odour of petrol exhaust and car fumes was observed	• Time and date of property inspection: 23/11/22 – 03:24pm to 03:30pm • Overcast • Wind: 9 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 14.7 °C (weatherZone)
Limnos Poultry, 109-111 Craig Road, Devon Meadows • Poultry Store • Litter was observed on the ground at the entrance. • A truck loaded with rusty containers, and stacks of wooden pellets were observed onsite. • A moderate spraying sound from onsite machinery, bird noise, and low traffic noise was heard. • A frequent hay/organic odour and raw chicken odour were observed.	• Time and date of property inspection: 23/11/22 – 11:09am to 11:20am • Overcast • Wind: 7 km/hr (weatherZone) • Wind direction: W (weatherZone) • Temperature: approximately 14.4 °C (weatherZone)

Site Photographs

Figure 1: LMF Transport PTY LTD, 16 Railway Road, Clyde

Figure 2: LMF Transport PTY LTD, 16 Railway Road, Clyde

Figure 3: LMF Transport PTY LTD, 16 Railway Road, Clyde

Figure 4: LMF Transport PTY LTD, 16 Railway Road, Clyde

Figure 5: PJ Communications PTY LTD, 17 Finsbury Road, Devon Meadows

Figure 6: PJ Communications PTY LTD, 17 Finsbury Road, Devon Meadows

Figure 7: Clyde CFA, 17 Railway Road, Clyde

Figure 8: Clyde CFA, 17 Railway Road, Clyde

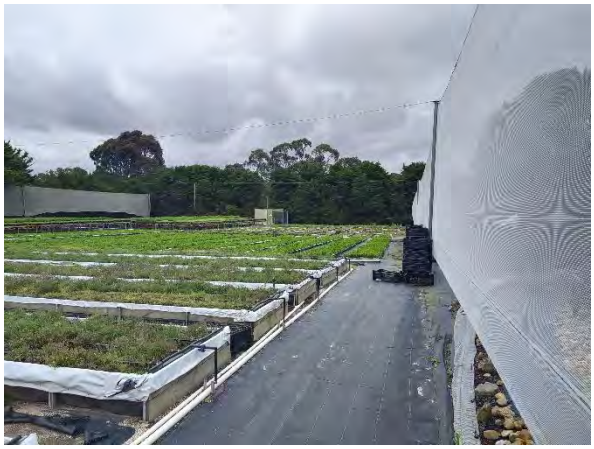


Figure 9: Fresh Leaf Farms Limited, 30 Clyde-Five Ways Road, Clyde

Figure 10: Fresh Leaf Farms Limited, 30 Clyde-Five Ways Road, Clyde

Figure 11: Fresh Leaf Farms Limited, 30 Clyde-Five Ways Road, Clyde

Figure 12: Fresh Leaf Farms Limited, 30 Clyde-Five Ways Road, Clyde

Figure 13: 30 Twyford Road, Clyde

Figure 14: 30 Twyford Road, Clyde

Figure 15: 30 Twyford Road, Clyde

Figure 16: 30 Twyford Road, Clyde

Figure 17: Caseys Top Catz Boarding Cattery, 34 Bakers Road, Clyde

Figure 18: Caseys Top Catz Boarding Cattery, 34 Bakers Road, Clyde

Figure 19: Caseys Top Catz Boarding Cattery, 34 Bakers Road

Figure 20: Caseys Top Catz Boarding Cattery, 34 Bakers Road

Figure 21: Cartage Australia 35 Devon Road, Devon Meadows

Figure 22: Cartage Australia 35 Devon Road, Devon Meadows

Figure 23: Cartage Australia 35 Devon Road, Devon Meadows

Figure 24: Cartage Australia 35 Devon Road, Devon Meadows

Figure 25: 42 Craig Road, Devon Meadows

Figure 26: 42 Craig Road, Devon Meadows

Figure 27: 42 Craig Road, Devon Meadows

Figure 28: 42 Craig Road, Devon Meadows

Figure 29: Devon Meadows Fire Station, 47-49 Finsbury Road, Devon Meadows

Figure 30: Devon Meadows Fire Station, 47-49 Finsbury Road, Devon Meadows

Figure 30: Metro Industrial Sands and TGS Industrial Sands , 60 Devon Road, Devon Meadows

Figure 31: Metro Industrial Sands and TGS Industrial Sands , 60 Devon Road, Devon Meadows

Figure 32: Metro Industrial Sands and TGS Industrial Sands , 60 Devon Road, Devon Meadows

Figure 34: Metro Industrial Sands and TGS Industrial Sands , 60 Devon Road, Devon Meadows

Figure 33: B&E Flowers, 75 Fisheries Road, Devon Meadows

Figure 34: B&E Flowers, 75 Fisheries Road, Devon Meadows

Figure 35: J & Y Healey PTY, 85 Devon Road, Devon Meadows

Figure 36: J & Y Healey PTY, 85 Devon Road, Devon Meadows

Figure 37: LJ Kitchen, 90 Clyde-Five Ways Road, Clyde

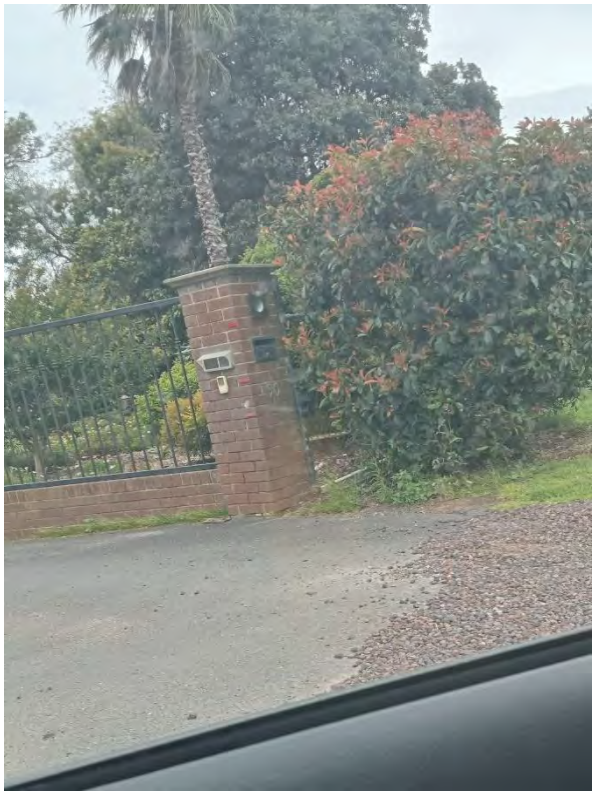


Figure 40: LJ Kitchen, 90 Clyde-Five Ways Road, Clyde

Figure 38: Halit Flowers, 95 Devon Road, Devon Meadows

Figure 39: Halit Flowers, 95 Devon Road, Devon Meadows

Figure 40: South Gippsland Eggs 100 Devon Road, Devon Meadows

Figure 41: South Gippsland Eggs 100 Devon Road, Devon Meadows

Figure 42: J & E Wholesale Flowers 105 Devon Road, Devon Meadows

Figure 43: J & E Wholesale Flowers 105 Devon Road, Devon Meadows

Figure 44: Plantex Nursery, 110 Campbells Road,Clyde

Figure 45: Plantex Nursery, 110 Campbells Road,Clyde

Figure 46: Nunkeri Stables, 111 Craig Road, Cranbourne South

Figure 50: Nunkeri Stables, 111 Craig Road, Cranbourne South

Figure 47: D'Alberto Egg Farm, 135 Devon Road, Devon Meadows

Figure 48: D'Alberto Egg Farm, 135 Devon Road, Devon Meadows

Figure 49: D'Alberto Egg Farm, 135 Devon Road,Devon Meadows

Figure 50: D'Alberto Egg Farm, 135 Devon Road,Devon Meadows

Figure 51: 251 Clyde Five - Ways Road, Clyde

Figure 52: 251 Clyde Five - Ways Road, Clyde

Figure 53: 7-Eleven Petrol Station Cranbourne South, 1240 Ballarto Road, Cranbourne East

Figure 54: Eleven Petrol Station Cranbourne South, 1240 Ballarto Road, Cranbourne East

Figure 55: Buncha Flowers, 1360 Ballarto Road, Devon Meadows

Figure 60: Buncha Flowers, 1360 Ballarto Road, Devon Meadows

Figure 56: Aurora Construction Materials ACM Clyde, 1470 Ballarto Road, Clyde

Figure 57: Aurora Construction Materials ACM Clyde, 1470 Ballarto Road, Clyde

Figure 58: Aurora Construction Materials ACM Clyde, 1470 Ballarto Road, Clyde

Figure 59: Aurora Construction Materials ACM Clyde, 1470 Ballarto Road, Clyde

Figure 60: BP Service Station, 1490 Ballarto Road, Clyde

Figure 61: BP Service Station, 1490 Ballarto Road, Clyde

Figure 67: E.E. Muir and Sons, 1985 South Gippsland Highway, Clyde

Figure 62: E.E. Muir and Sons, 1985 South Gippsland Highway, Clyde

Figure 63: E.E. Muir and Sons, 1985 South Gippsland Highway, Clyde

Figure 70: E.E. Muir and Sons, 1985 South Gippsland Highway, Clyde

Figure 64: 7-11 Petrol station, Corner Clyde Five- Ways Road South Gippsland Highway, Clyde

Figure 65: 7-11 Petrol station, Corner Clyde Five- Ways Road South Gippsland Highway, Clyde

Figure 66: 7-11 Petrol station, Corner Clyde Five- Ways Road South Gippsland Highway, Clyde

Figure 67: 7-11 Petrol station, Corner Clyde Five- Ways Road South Gippsland Highway, Clyde

Figure 68: South Gippsland Highway

Figure 69: South Gippsland Highway

Figure 70 Casey BMX Club,160 Berwick - Cranbourne Road, Cranbourne East

Figure 71: Casey BMX Club, 160 Berwick - Cranbourne Road, Cranbourne East

Figure 72: Limnos Poultry, 109-111 Craig Road,Cranbourne South

Figure 80: Limnos Poultry, 109-111 Craig Road, Cranbourne South

Figure 73: Limnos Poultry, 109-111 Craig Road, Cranbourne South

Figure 74: Limnos Poultry, 109-111 Craig Road, Cranbourne South

Figure 75: 50 Worthing Road, Clyde

Figure 76: 50 Worthing Road, Clyde

Figure 77: Crop Wise Fertilisers Pty, 40 Moores Road,Clyde

Figure 78: Crop Wise Fertilisers Pty, 40 Moores Road,Clyde

Figure 79: Crop Wise Fertilisers Pty, 40 Moores Road,Clyde

Figure 80: Crop Wise Fertilisers Pty, 40 Moores Road,Clyde

Figure 81: Corrigan L&M, 71 Fisheries Road, Devon Meadows

Figure 90: Corrigan L&M, 71 Fisheries Road, Devon Meadows

Figure 82: Bashkimi Flowers, 85 Clyde Five-Ways Road, Clyde

Figure 83: Bashkimi Flowers, 85 Clyde Five-Ways Road, Clyde

Figure 84: 165 Clyde Five- Ways Road, Clyde

Figure 85: 165 Clyde Five- Ways Road, Clyde

Figure 86: 165 Clyde Five- Ways Road, Clyde

Figure 87: 165 Clyde Five- Ways Road, Clyde

Figure 88: 165 Clyde Five- Ways Road, Clyde

Figure 89: 165 Clyde Five- Ways Road, Clyde

Figure 90: 215 Clyde Five- Ways Road, Clyde

Figure 100: 215 Clyde Five- Ways Road, Clyde

Figure 101: 215 Clyde Five- Ways Road, Clyde

Figure 91: 215 Clyde Five- Ways Road, Clyde

Figure 92: 235 Clyde Five- Ways Road, Clyde

Figure 93: 235 Clyde Five- Ways Road, Clyde

Figure 94: 245 Clyde Five- Ways Road, Clyde

Figure 95: 245 Clyde Five- Ways Road, Clyde

Figure 96: 245 Clyde Five- Ways Road, Clyde

Figure 97: 245 Clyde Five- Ways Road, Clyde

Figure 98: 1591 South Gippsland Highway, (877m North West of PSP) Cranbourne East

Figure 99: 1591 South Gippsland Highway, (877m North West of PSP) Cranbourne East

Figure 100: 1790 South Gippsland Highway, Devon Meadows

Figure 101: 1790 South Gippsland Highway, Devon Meadows

Figure 102: Faceys Nursery Pty Ltd, 1870 South Gippsland Highway, Devon Meadows

Figure 103: Faceys Nursery Pty Ltd, 1870 South Gippsland Highway, Devon Meadows

Figure 104: Clear View Commercial Glass 1925 South Gippsland Highway, Clyde

Figure 105: Clear View Commercial Glass 1925 South Gippsland Highway, Clyde

Figure 106: 1715 South Gippsland Highway, Cranbourne East

Figure 107: 1715 South Gippsland Highway, Cranbourne East

Figure 119: Golden Nursery, 1945 South Gippsland Highway, Clyde

Figure 120: Golden Nursery, 1945 South Gippsland Highway, Clyde

Figure 121: Golden Nursery, 1945 South Gippsland Highway, Clyde

Figure 122: Golden Nursery, 1945 South Gippsland Highway, Clyde

Figure 123: Growing Chickens, Campbells Road, Clyde

Figure 124: Growing Chickens,Campbells Road, Clyde

Figure 125: Casey BMX Club, 160 Berwick-Cranbourne Road, Cranbourne East

Figure 126: Casey BMX Club, 160 Berwick-Cranbourne Road, Cranbourne East

Figure 127: Casey BMX Club, 160 Berwick-Cranbourne Road, Cranbourne East

Figure 128: Casey BMX Club, 160 Berwick-Cranbourne Road, Cranbourne East

Figure 129: Dandenong Forest Area, Junction Village

Figure 108: Dandenong Forest Area, Junction Village

Figure 109: Eastern Treatment Plan Dual Pipe Scheme (849m North East of PSP), Clyde

Figure 110: Eastern Treatment Plan Dual Pipe Scheme (849m North East of PSP), Clyde

Figure 111: 1780 South Gippsland Highway, Devon Meadows

Figure 112: 1780 South Gippsland Highway, Devon Meadows

Figure 113: 1780 South Gippsland Highway, Devon Meadows

Figure 114: 1780 South Gippsland Highway, Devon Meadows

Figure 115: -73 Worthing Road, Devon Meadows

Figure 116: -73 Worthing Road, Devon Meadows

Figure 117: -255 Clyde-Five Ways Road, Clyde

Figure 118: -255 Clyde-Five Ways Road, Clyde

Appendix D – Summary of Potential for Contamination

Summary of Site Characterisation – Potential for Contamination

Table summarising the contamination potential for each site within the Casey Fields and Devon Meadows PSP and surrounds, based on the land uses with potential to contaminate land presented in Table 2 of Planning Practice Note 30 (DELWP, 2021).

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	PJ Communications PTY LTD. 17 Finsbury Road, Devon Meadows	Residence	House and front yard. Some surface waste, livestock and metal temporary construction-style fencing.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment (PRSA)
-	LMF Transport PTY LTD. 16 Railway Road, Clyde	Residence	Old wooden house with front and back yard. Registered business address for transport of prescribed industrial waste; no business activity was apparent.	Yes	Low	No further action required – General Environmental Duty Applies
-	50 Worthing Road, Devon Meadows	Primary School	Portables, basketball court and schoolyard. Current EPA works approval for sewage treatment.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
101	7-11 Petrol station 2025 South Gippsland Highway, Clyde (Corner Clyde-Five Ways Road and South Gippsland Highway)	Petrol station	Service station. The shelter façade appeared rotten. No signs of contamination were observed.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
113	BP Service Station. 1490 Ballarto Road, Clyde	Petrol station	Service station. No signs of contamination were observed.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
23	Cartage Australia 35 Devon Road, Devon Meadows	Transportation service (former quarry site)	Buildings, open space, gravel roads and trucks onsite. Freight containers and potential soil stockpiles were observed. Active earthworks next door. Historic quarry excavations were recorded at this site. The site has been backfilled and the nature of the fill material is unknown.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
28	Halit Flowers 95 Devon Road, Devon Meadows	Wholesale florist (Former poultry farm)	Sheds, portables, trucks and open space onsite. No signs of contamination were observed. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
29	J&E Wholesale Flowers 105 Devon Road, Devon Meadows	Wholesale florist	Residential house, sheds, greenhouses, and portable labelled 'Office'. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
27	J&Y Healey PTY 85 Devon Road, Devon Meadows	Plant nursery	Faded greenhouses. A stockpile of tanbark and a pile of wood and wire onsite.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
120	Buncha Flowers 1360 Ballarto Road, Devon Meadows	Plant Nursery	Historic market gardens, near chicken broiler. Potential use of pesticides due to site use.	Inspected from the road (visitors by appointment only)	Medium	Proceed to Preliminary Risk Screening Assessment
75	South Gippsland Eggs 100 Devon Road, Devon Meadows	Farm	Egg farm. Shed and adjoining paddocks onsite. No signs of contamination were observed. Potential impacts to groundwater from nutrients, pathogens and potential use of alum and other chemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
32/33	D'Alberto Egg Farm 135 Devon Road, Devon Meadows	Farm	Egg farm. Sheds, brick building, open space and vehicles onsite. Minor surface waste observed. Potential impacts to groundwater from nutrients, pathogens and use of alum and other chemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
81	Metro Industrial Sands and TGS Industrial Sands 60 Devon Road, Devon Meadows	Mining and extractive industries (former quarry site)	Sheds and surface waste onsite. Gravel stockpiles and rusty machinery parts observed. Historic quarry excavations recorded at this site. The site has been backfilled and the nature of the fill material is unknown.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
80	Metro Industrial Sands and TGS Industrial Sands 40 Devon Road, Devon Meadows	Mining and extractive industries (former quarry site)	Historic quarry excavations were recorded at this site. The site has been backfilled and nature of the fill material is unknown.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
24	Independent Sands 55 Devon Road, Devon Meadows	Mining and extractive industries	From aerial photographs - the Site appears to be an operating site (sand/soil processing). A water-filled quarry is apparent in recent aerial photographs.	No	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
45	Gary Mac's Cranbourne Wreckers 1790 South Gippsland Highway, Devon Meadows	Auto wrecker	Sheds and old vehicles in an overgrown field. Scrap metal recovery. Potential for oil and fuel leaks from site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
115	Aurora Construction Materials ACM Clyde 1470 Ballarto Road, Clyde	Concrete batching and landscape gardening/trade supplier	Soil stockpile and minor surface waste at site entrance. Former agricultural activities and market gardens. Septic tank onsite.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed
-	Clyde CFA 17 Railway Road, Clyde	Fire station	Brick fire station and barbecue area surrounded by grass-covered open space and adjacent bushland. Surface waste (concrete pipe, bricks, whitegoods) onsite. Potential for PFAS contamination from storage and potential leaks of firefighting foams.	Yes	High	PRSA or audit option applies Proceed to Environmental Audit if a new land use is proposed

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	Schreurs & Sons 30 Twyford Road, Clyde	Housing development	Housing estate actively under construction. Temporary fencing labelled 'Soho Living Project'. Minor surface waste was observed.	Yes	Low	No further action required – General Environmental Duty Applies
57/58	Faceys Nursery Pty Ltd 1870 South Gippsland Highway, Devon Meadows	Plant nursery	Sheds, residential house, water tanks, and white greenhouses. Farm machinery towers next door. No signs of contamination were observed. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
68	1930 South Gippsland Hwy, Devon Meadows	Residential property (former concrete manufacturing site)	Potentially contaminated due to the site was used to manufacture concrete products such as septic tanks and pits since 1971, permit granted in 1977.	No (obstructed by trees and garden)	Medium	Proceed to Preliminary Risk Screening Assessment
69/70	1934 South Gippsland Hwy, Devon Meadows	Farm/ horse riding	From the aerial photographs – a large vacant property, with a horse trail and some sheds. Signs of waste / dumping and imported fill (white material around the trail). Vegetation varies across the property from cleared areas to wooded areas with substantial sized trees.	No (difficult to see from the road)	Medium	Proceed to a Preliminary Site Investigation (PSI) or a Preliminary Risk Screening Assessment (PSRA)
104	Bashkimi Flowers, 85 Clyde-Five Ways Road, Clyde	Plant nursery	Greenhouses and paddocks. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
93	Golden nursery 1945 South Gippsland Highway, Clyde	Plant nursery	Greenhouses and sheds. Gravel stockpiles, a freight container, and surface waste (metal, terracotta pots) onsite.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
92	Clear view commercial glass 1925 South Gippsland Highway, Clyde	Glass manufacturer	Glass merchant. Shed with surrounding yard. Difficult to see much from the road. The site generally looked neat in appearance.	Yes	High	Proceed to a PSRA or Environmental Audit
-	LJ Kitchen 90 Clyde-Five Ways Road, Clyde	Cabinet maker	Residence with adjoining gardens.	Yes	Low	No further action required – General Environmental Duty Applies
97	E.E. Muir and Sons 1985 South Gippsland Highway, Clyde	Agrochemicals supplier (former pallet manufacturer)	Sheds and several drums/chemical containers cleaned for recycling. Staff stated that the fertilisers onsite are non-chemical fertilisers. In 1972 the site requested to manufacture pallets and store saw dust. May have used and stored chemicals to treat timber.	Yes	High	Proceed to a PSRA or Environmental Audit
31-33	125 - 133 Devon Road, Devon Meadows	Agricultural farm	Not inspected. Potential use of pesticides due to site use.	No (access through D'Alberto Egg Farm which is biosecurity area)	Medium	Proceed to a PSI or a PRSA

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	73 Worthing Road, Devon Meadows	Agricultural farm	Residence with surrounding gardens. Pile of rocks and concrete pipe onsite.	Yes	Low	No further action required – General Environmental Duty Applies
-	Limnos Poultry 109-111 Craig Road, Devon Meadows	Poultry farm	Sheds, wooden pellets, machinery, and trucks onsite. Minor surface waste observed. Potential impacts to groundwater from nutrients, pathogens and use of alum and other chemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	Nunkeri Stables 111 Craig Road, Cranbourne South	Horse Riding School	Rural residence with adjoining farm buildings, and adjacent paddocks. Some surface waste (drums, dumped rubbish, old machinery, woodpiles) present.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	Devon Meadows Fire Station 47-49 Finsbury Road, Devon Meadows	Fire station	Brick building and carpark. No notable evidence of disturbance. Potential for PFAS contamination from storage of firefighting foams, with the potential for spills and leaks.	Yes	Medium	No further action required – General Environmental Duty Applies
-	Corrigan L&M 71 Fisheries Road, Devon Meadows	Agricultural farm	Rural residence with adjacent shed and paddocks. No notable evidence of disturbance. Potential use of pesticides and agrichemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	B&E flowers 75 Fisheries Road, Devon Meadows	Flower farm	Greenhouses on site. No notable evidence of disturbance. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	Crop Wise Fertilisers Pty 40 Moores Road, Clyde	Fertiliser manufacture/storage	Sheds, trucks, and dumpsters. Soil stockpiles and surface waste (wood, metal, plastic, textiles) onsite.	Yes	High	Proceed to Environmental Audit
-	24 Bakers Road, Clyde	Machinery shed	In 1980, Council permit granted to establish a machinery shed on the site. Potential contamination from machinery maintenance and storage (oils, greases and lubricants)	No	Medium	Proceed to a PSI or a PRSA
-	Caseys Top Catz Boarding Cattery 34 Bakers Road, Clyde	Cattery	Rural residence with adjoining cattery and adjacent agricultural land next door. Gas cylinders and wood pile on site.	Yes	Low	No further action required – General Environmental Duty Applies
-	40 Bakers Road, Clyde	Plant nursery	The site was permitted to operate as a wholesale nursery in 1980. Application of pesticides/herbicides may have occurred.	No	Medium	Proceed to Preliminary Risk Screening Assessment
-	Growing chickens Campbells Road, Clyde	Poultry farm	Rural residence and agricultural land. No sign of poultry farming observed. Potential impacts to groundwater from nutrients, pathogens and use of alum and other chemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	Fresh Leaf Farms Limited 30 Clyde-Five Ways Road, Clyde	Agricultural land	Greenhouses and adjoining buildings. Minor surface waste observed. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	Rob's Redgum Supplies – Firewood 65 Campbells Road, Clyde	Timber yard (former poultry farm)	Currently a timber yard, heavy industry is visible from the road and in aerial photos. Potential farm contamination from machinery, maintenance (oils, greases and lubricants) and agricultural chemicals In 1973, an application to extend a poultry farm at this address was accepted by Council. Potential impacts from former poultry farm.	No	Medium	Proceed to a PSI or a PRSA
-	Plantex Nursery 110 Campbells Road, Clyde	Plant nursery	Residence with greenhouses and sheds. Potential use of pesticides due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	Casey BMX club 160 Berwick-Cranbourne Road, Cranbourne East	BMX Club	BMX dirt track, buildings and trail within recreational sporting precinct. Chemical containers and possible soil stockpiles present.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
-	7-Eleven Petrol Station 1240 Ballarto Road Cranbourne south	Active service station	Petrol station. No evidence of notable disturbance.	Yes	High	Proceed to Environmental Audit

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	South Gippsland Highway	Highway	Highway. No evidence of notable disturbance.	Yes	Low	No further action required – General Environmental Duty Applies
120	1360 Ballarto Road, Cranbourne East	Plant nursery	Plant nursery. Historic use as a market garden and flower farm, down gradient to a chicken broiler.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
119	1370 Ballarto Road, Clyde	Farm	Historic use as a market garden and flower farm, down gradient to a chicken broiler. Potential use of pesticides due to site use.	No (access through Buncha Flowers which is by appointment only)	Medium	Proceed to Preliminary Risk Screening Assessment
113	1490 Ballarto Road, Clyde	Active service station	BP Service Station. No evidence of notable disturbance.	Yes	High	Proceed to Environmental Audit
-	1760 Ballarto Road, Clyde	Machinery shed	Council permit granted to establish a machinery shed on the site in 1980. Potential contamination from machinery maintenance and storage (oils, greases and lubricants)	No	Medium	Proceed to a Preliminary Site Investigation (PSI) or a Preliminary Risk Screening Assessment
-	90 Clyde-Five Ways – Road, Clyde	Former market garden	The site was used as a market garden. Potential use of pesticides and agrichemicals due to site use. Machinery shed was built in 1978. Potential contamination from machinery maintenance and storage.	No	Medium	Proceed to a PSI or a PRSA

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
-	180 Clyde-Five Ways Road, Clyde	Market garden	Site used as a market garden since the 1960's with a machinery shed built in 1978. Use of pesticides and herbicides and storage of fuels/solvents at the site for machinery.	No	Medium	Proceed to Preliminary Risk Screening Assessment
110	255 Clyde-Five Ways Road, Clyde	Rural residence with adjoining paddocks	House with outbuildings and sheds, and adjacent paddocks. Minor surface waste (rusted metal, woodpiles). Historic use for agricultural grazing, market gardens, farm machinery shed.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
108	251 Clyde-Five Ways Road, Clyde	Agricultural farm	Sheds and water tanks. Some surface waste observed on site. Historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. Potential use of pesticides and agrichemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
109	245 Clyde-Five Ways Road, Clyde	Agricultural farm	Greenhouses and paddocks. Widespread surface waste (wood, plastic, concrete pipes, broken tubing) and a gravel stockpile onsite. Historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
107	235 Clyde-Five Ways Road, Clyde	Rural residence with adjoining paddocks	Two farm sheds, a farmhouse and three freight containers observed. Minor surface waste (concrete piping, woodpile). Historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. Potential use of pesticides and agrichemicals due to site use.	Yes	Medium	Proceed to a PSI or a PRSA
106	215 Clyde-Five Ways Road, Clyde	Rural residence with adjoining paddocks	Farmhouse, sheds, and paddocks. Minor surface waste (wood, metal). Historic use for agricultural grazing, market gardens, farm machinery shed built in 1980. Potential use of pesticides and agrichemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
90	165 Clyde-Five Ways Road, Clyde	Rural residence with adjoining paddocks.	Abandoned house, shed, and paddocks. Old machinery, abandoned car, and widespread surface waste (insecticide, herbicide and fungicide containers, chlorine containers, textiles, wood) onsite. Historic use for agricultural grazing, market gardens, farm machinery shed built in 1980.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment
83	1715 South Gippsland Highway, Cranbourne East	Rural residence with adjoining paddocks	Gated property. Agricultural grazing, market gardens/agricultural cropping with farmhouse and large dam. Potential use of pesticides and agrichemicals due to site use.	Yes	Medium	Proceed to Preliminary Risk Screening Assessment

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
22	1780 South Gippsland Highway, Devon Meadows	Church	Church surrounded by landscaped gardens and carpark. Small excavator undertaking active earthworks during inspection. Next door to overgrown paddock containing freight containers. Site subject to EPA audit.	Yes	High	Proceed to Environmental Audit
-	1591 South Gippsland Highway, Cranbourne East	Rural residence	House and sheds with adjoining paddock. Gravel stockpile mixed with concrete and hard rubbish in front yard. Liquid container observed onsite. Site subject to EPA audit.	Yes	High	Proceed to Environmental Audit
-	Eastern Treatment Plan Dual Pipe Scheme (849m North East of PSP)	Recycled water pipeline	Eastern Irrigation Scheme drain and underground pipeline. Surrounding ground surface was wet. Site subject to EPA audit.	Yes	High	Proceed to Environmental Audit
-	Forest area within State Dandenong Forest Management Area (891m West of PSP)	Bushland	Native vegetation area. Well-maintained, minor surface waste. Site subject to EPA audit.	Yes	High	Proceed to Environmental Audit
5	32-34 Craig Road, Junction City	Rural residence with adjoining paddocks	House, adjoining shed and garden. Paddocks with live stock. A wetland is visible in aerial photos.	No	Medium	Proceed to PSI or PSRA
6	Land under Public Acquisition Overlay (PAO3) runs across 32-34 and 36-38 Craig Road, Devon Meadows	Appears to be a drain	The shape of PAO3 is suggestive of a drain line	No	Medium	Proceed to PSI or PSRA

ID	Property name / Address	Current Site Use / Activity*	Description / Findings	Site Inspections	Potential for Contamination	Where a sensitive land use is proposed, the Recommended Further Action is:
44	36-38 Craig Road, Junction City	Rural residence with adjoining paddocks	Horse stables, stock mounting yard and sheds. Circular horse pen.	No	Medium	Proceed to PSI or PSRA
43	40W Craig Road, Devon Meadows (Owned by Melbourne Water Corporation)	Former quarry	Open paddock with widespread surface waste present. Evidence of major ground disturbance (quarrying). Recent aerial photos show large waterfilled quarry on site, with a significant amount of algal growth. Subject to Public Acquisition Overlay (PAO4).	Yes	High	Proceed to Environmental Audit
41-42	42-48 Craig Road, Devon Meadows	Appears to be used presently as a laydown area. Former quarry	Historic photos indicate this was a quarried area. Site has been backfilled and nature of the fill material is unknown. Recent aerial photos show the site to be used for storage containers. It looks to be a laydown area. Open paddock with widespread surface waste present. Evidence of major ground disturbance (quarrying).	Yes	High	Proceed to Environmental Audit
40	48W Craig Road, Devon Meadows (Owned by Melbourne Water Corporation)	Former quarry and extractive industries	Open paddock, widespread surface waste present. Evidence of major ground disturbance (quarrying). Potentially contaminated due to previous sand extraction and processing since the 1970's. Subject to Public Acquisition Overlay (PAO4).	Yes	High	Proceed to Environmental Audit

*As observed during the site inspections on 23rd and 28th November 2022.

Appendix E – Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO LITE

Date: 30 Aug 2022 13:16:03

Reference: LS035757 EL

Address: Devon Road, Cranbourne East, VIC 3977

Dataset Listing

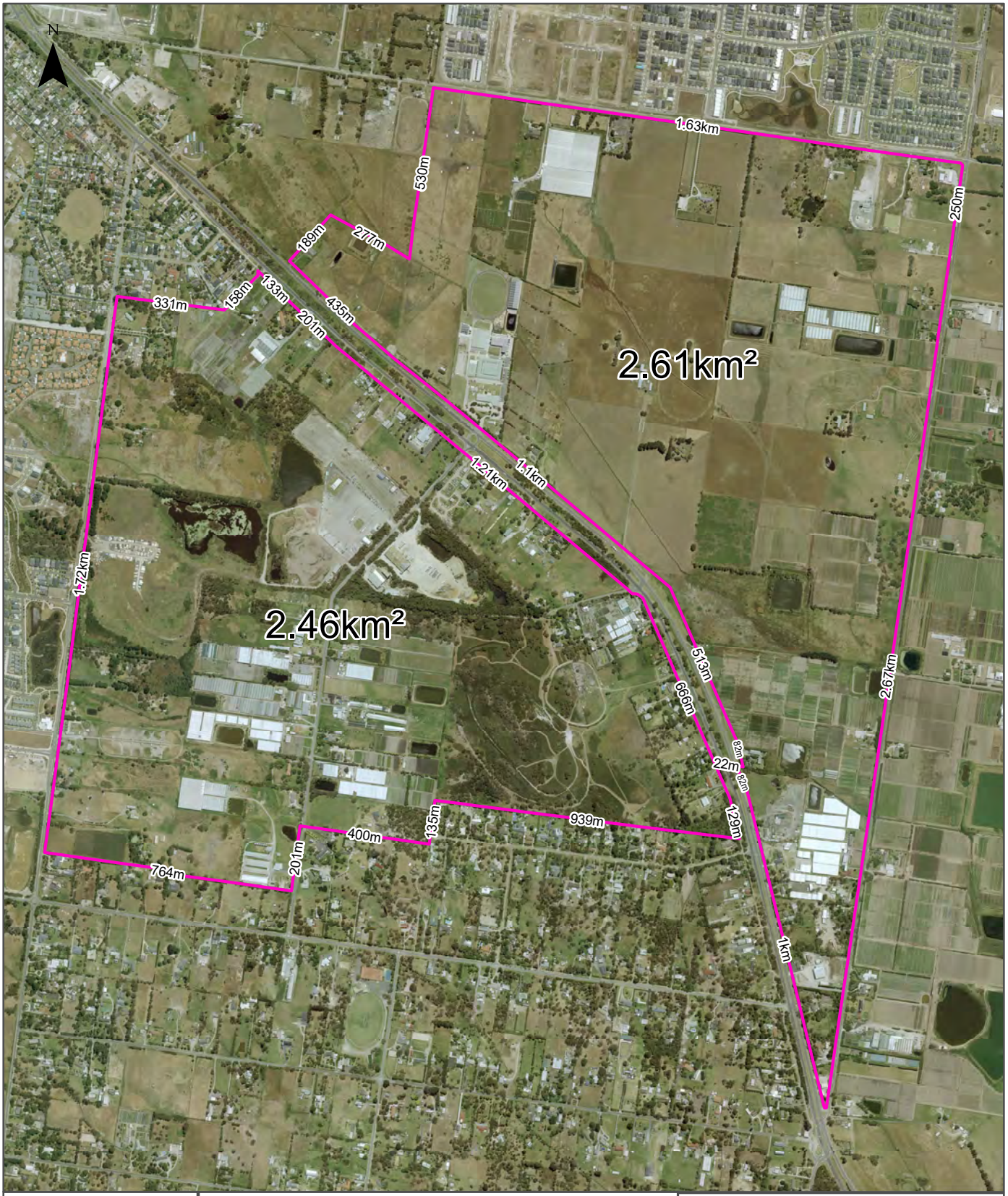
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	03/08/2022	01/08/2022	Monthly	-	-	-	-
Current EPA Priority Sites	Environment Protection Authority (Vic)	01/08/2022	28/07/2022	Monthly	1000m	0	0	0
Former EPA Priority Sites & other Remedial Notices	Environment Protection Authority (Vic)	04/10/2021	01/09/2021	Monthly	1000m	1	1	1
EPA PFAS Site Investigations	Environment Protection Authority (Vic)	28/09/2021	18/09/2020	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	06/06/2022	06/06/2022	Quarterly	2000m	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	19/07/2022	19/07/2022	Monthly	1000m	1	1	4
EPA Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	01/08/2022	01/08/2022	Monthly	1000m	0	0	1
Current EPA Licensed Activities	Environment Protection Authority (Vic)	19/07/2022	22/07/2021	Monthly	1000m	0	0	0
Former EPA Licensed Activities	Environment Protection Authority (Vic)	19/07/2022	26/11/2021	Monthly	1000m	0	0	0
EPA Works Approvals	Environment Protection Authority (Vic)	01/08/2022	01/08/2022	Monthly	1000m	0	0	1
National Waste Management Facilities Database	Geoscience Australia	26/05/2022	07/03/2017	Annually	1000m	0	0	0
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	1000m	0	0	0
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	12/08/2020	12/08/2020	Quarterly	1000m	0	0	3
EPA Victorian Landfill Register	Environment Protection Authority (Vic)	03/06/2022	25/08/2020	Quarterly	1000m	0	0	0
Former Gasworks	Various historical sources collated by Lotsearch	15/08/2017	15/08/2017	Not required	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	23/08/2022	15/03/2012	Annually	1000m	1	1	1
Historical Business Directories (Premise & Intersection Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	150m	0	0	4
Historical Business Directories (Road & Area Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	150m	-	27	36
Historical Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500m	0	0	0
Historical Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500m	-	5	5
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	17/08/2022	17/08/2022	Quarterly	1000m	9	19	92
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000m	1	1	2
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0m	2	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0m	3	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0m	1	-	-

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0m	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	23/08/2021	23/08/2021	Quarterly	2000m	47	68	373
Groundwater Boreholes Earth Resources Database	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	20/05/2021	17/02/2010	Annually	2000m	11	16	57
Groundwater Boreholes Fed Uni	Federation University Australia	21/12/2017	07/01/2014	As required	2000m	0	0	0
Historical Mining Activity - Shafts	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	26/05/2022	26/05/2022	Annually	1000m	0	0	0
Geological Units 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000m	4	4	4
Geological Structures 1:250,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000m	0	0	0
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000m	0	0	0
Atlas of Australian Soils	ABARES	19/05/2017	17/02/2011	As required	1000m	1	2	2
Victorian Soil Type Mapping	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	24/08/2017	21/03/2016	Unknown	1000m	5	5	6
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	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	1000m	0	0	0
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	16/08/2022	10/08/2022	Monthly	1000m	3	18	45
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	16/08/2022	10/08/2022	Monthly	1000m	3	14	36
Commonwealth Heritage List	Australian Government Department of Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
Victorian Heritage Register	State Government Victoria - Department of Environment, Land, Water & Planning	17/08/2022	17/08/2022	Quarterly	1000m	0	0	0
Cultural Heritage Sensitivity	State Government Victoria - Department of Premier and Cabinet	17/08/2022	17/08/2022	Quarterly	1000m	11	18	46
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	17/08/2022	18/03/2022	Quarterly	1000m	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	15/11/2021	15/11/2021	Quarterly	1000m	0	0	0
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	25/08/2022	22/06/2022	Quarterly	1000m	0	0	0
Victorian Coastal Inundation Sea Level Rise	State Government Victoria - Department of Environment, Land, Water & Planning	10/04/2018	24/10/2017	Unknown	1000m	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	1000m	4	4	6
Ramsar Wetland Areas in Victoria	State Government Victoria - Department of Environment, Land, Water & Planning	28/03/2022	13/03/2019	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems Atlas	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	4	4	4
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	9	9	10

Site Diagram

Devon Road, Cranbourne East, VIC 3977



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 5.07km²

Total Perimeter: 15.8km

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Scale:

0 75 150 300 450 600 750
Meters

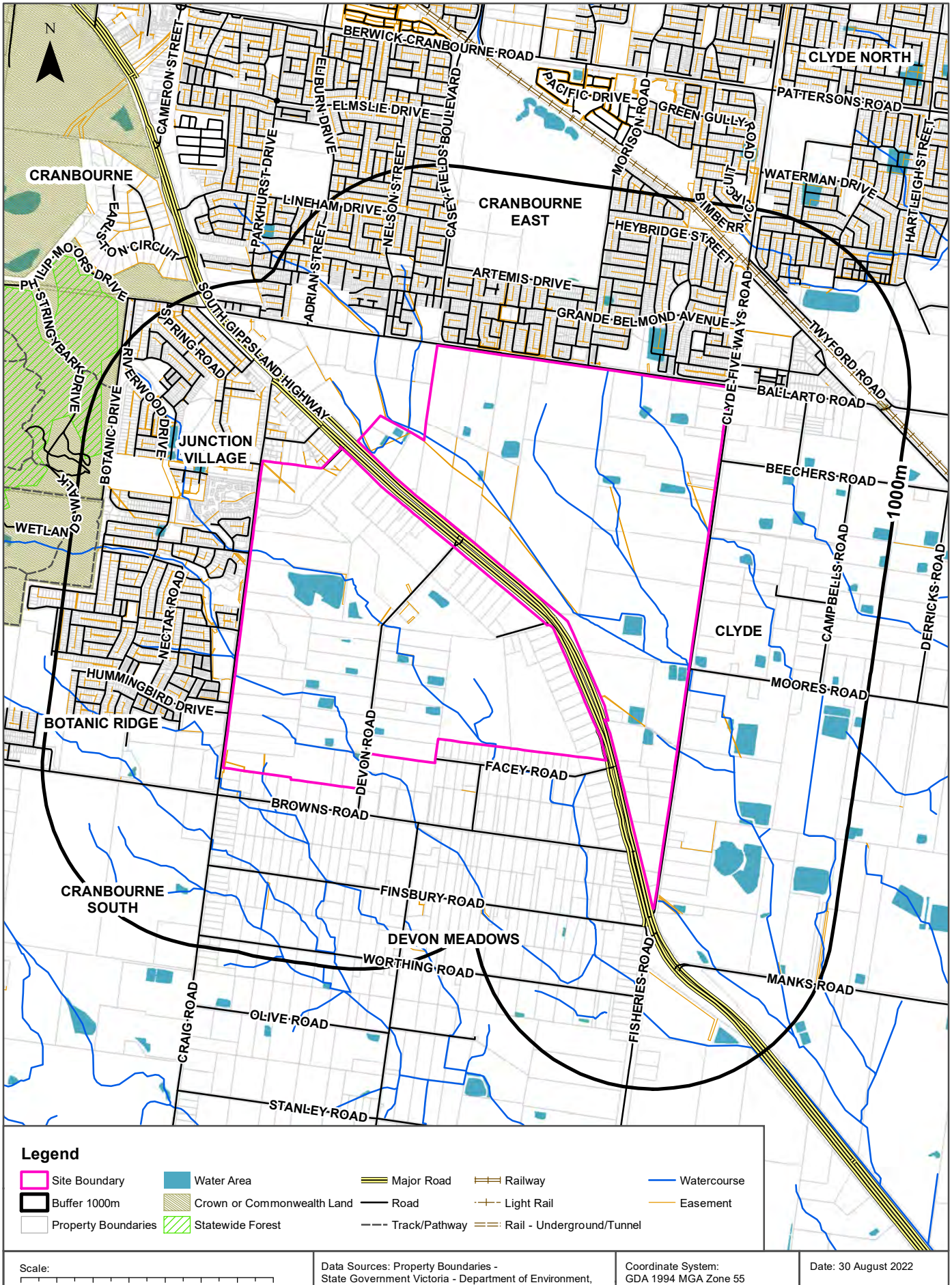
Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Coordinate System:
GDA 1994 MGA Zone 55

Date: 30 August 2022

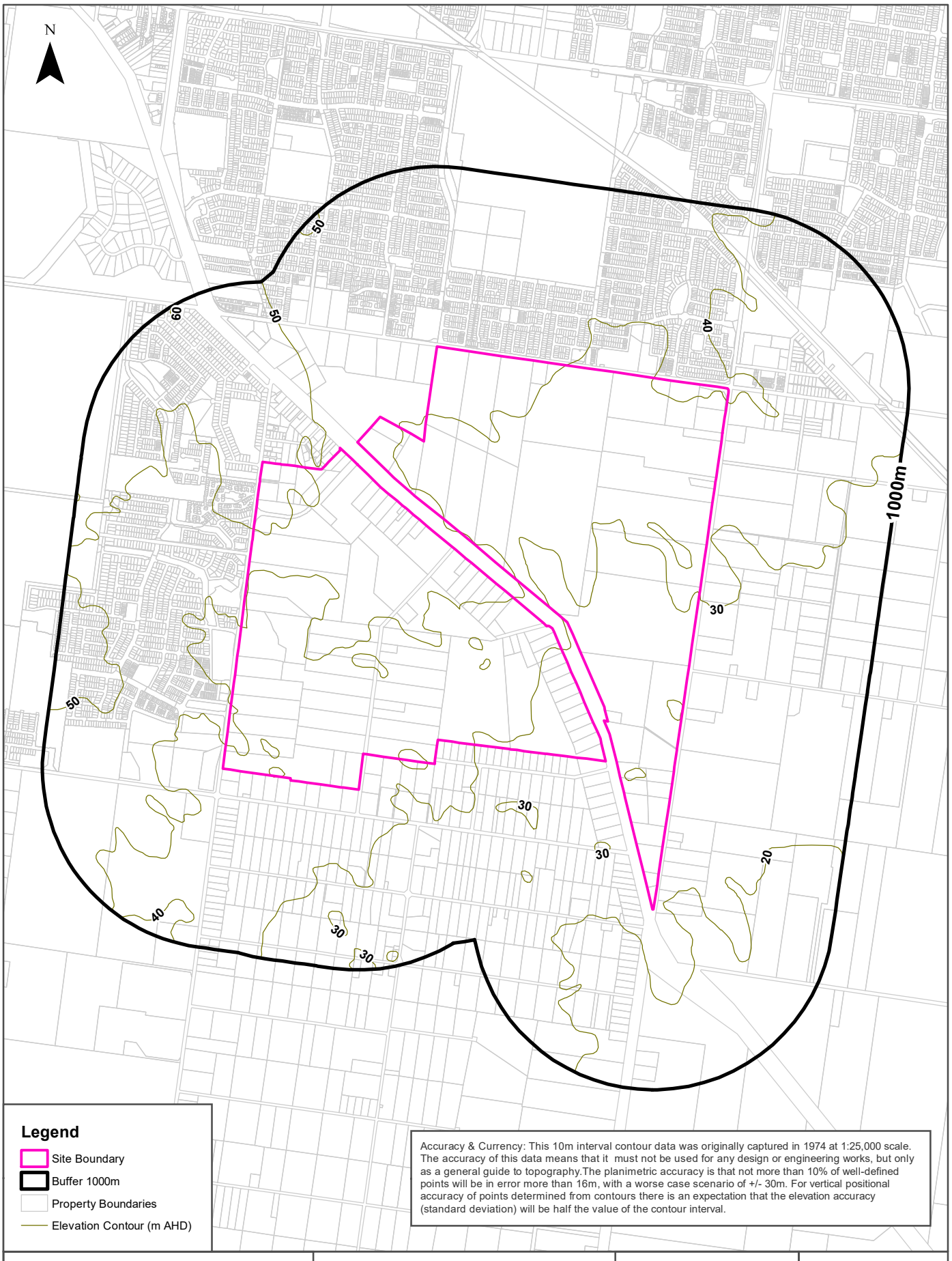
Topographic Data

Devon Road, Cranbourne East, VIC 3977



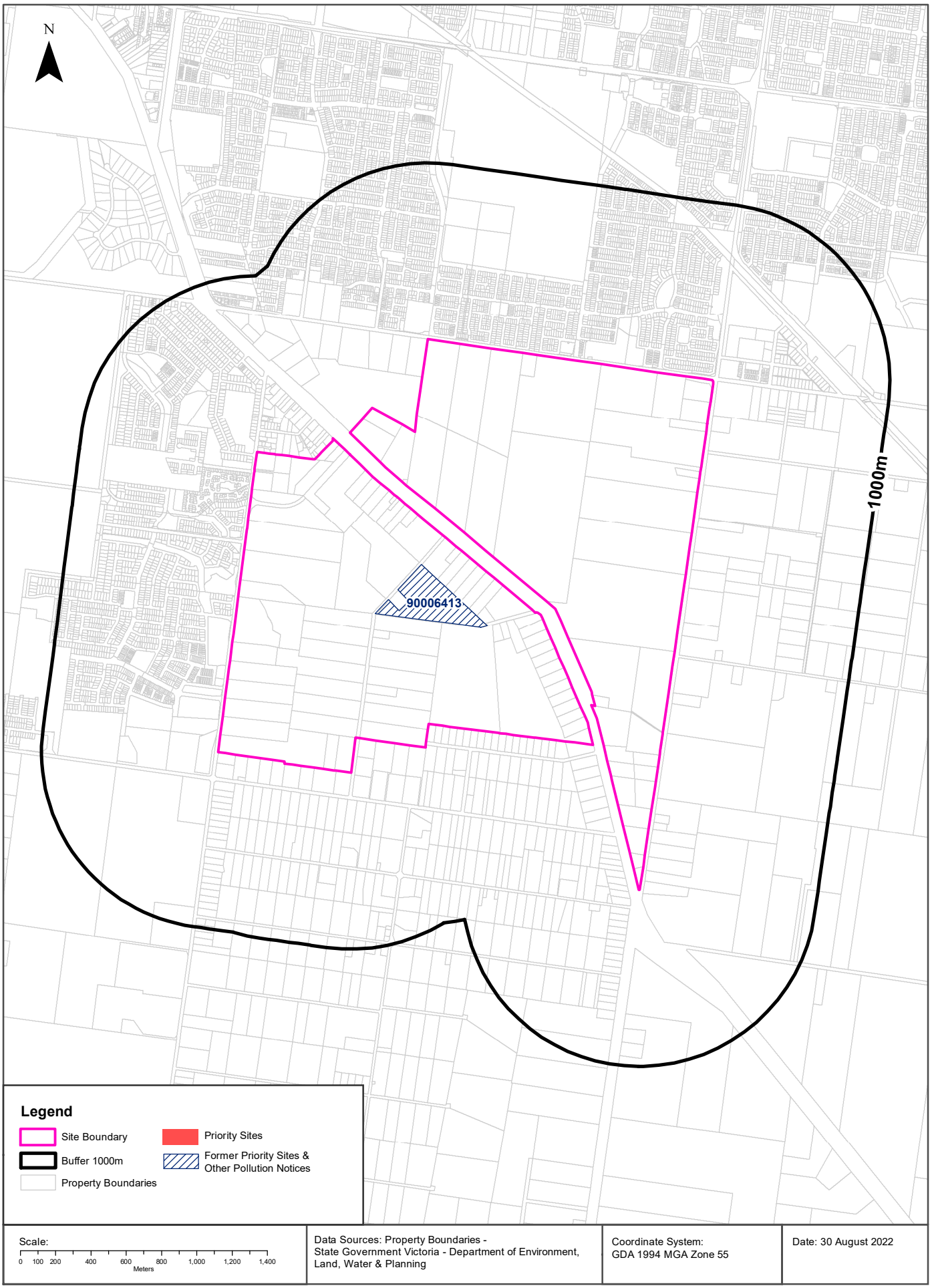
Elevation Contours (m AHD)

Devon Road, Cranbourne East, VIC 3977



EPA Records - Priority Sites & Pollution Notices

Devon Road, Cranbourne East, VIC 3977



EPA Priority Sites & Pollution Notices

Devon Road, Cranbourne East, VIC 3977

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
90006413	Pollution Abatement Notice	TGS INDUSTRIAL SANDS PTY LTD	60 DEVON RD	DEVON MEADOWS	Previous Pollution Notice	NOISE - SITE UNABLE TO MEET STANDARD	14/10/2015	Premise Match	0m	On-site

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

PFAS Investigation & Management Programs

Devon Road, Cranbourne East, VIC 3977

EPA PFAS Site Investigations

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

Map ID	Site Name	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

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

Defence PFAS Investigation & Management Program Investigation Sites

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

Map ID	Base Name	Address	Location Confidence	Distance	Direction
N/A	No records in buffer				

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

Defence PFAS Investigation & Management Program Management Sites

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

Map ID	Base Name	Address	Location Confidence	Distance	Direction
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	Location Confidence	Distance	Direction
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

Devon Road, Cranbourne East, VIC 3977

Defence 3 Year Regional Contamination Investigation Program

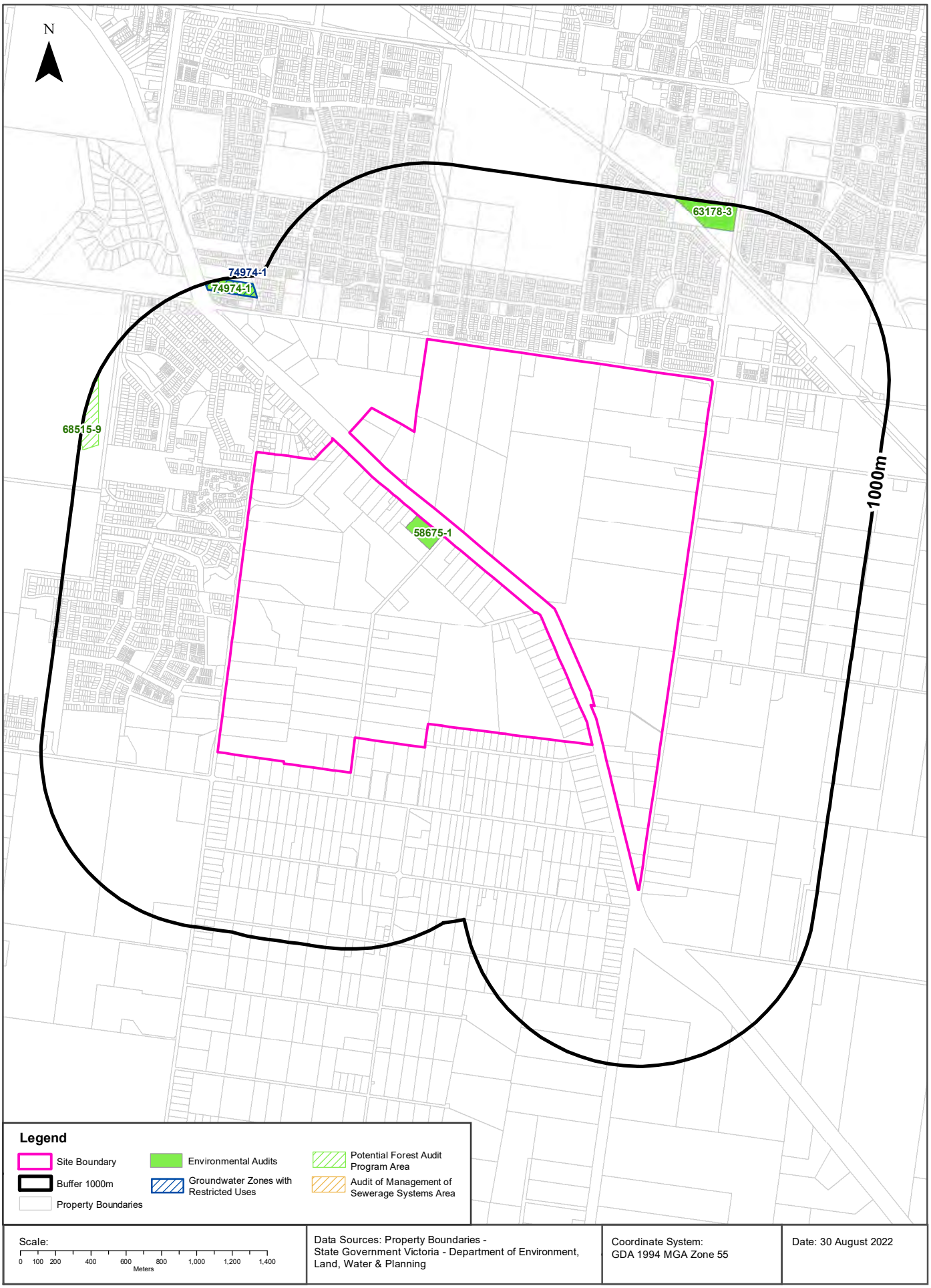
Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

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 - Audit Reports & GQRUZ

Devon Road, Cranbourne East, VIC 3977



EPA Records

Devon Road, Cranbourne East, VIC 3977

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
58675-1	8002065	PART OF LOT 2, DEVON ROAD	DEVON ROAD	CRANBOURNE	29/11/2005	53X Certificate	Premise Match	0m	On-site
63178-3	8005492	EASTERN TREATMENT PLANT DUAL PIPE SCHEME 350 NARRE WARREN RD	EASTERN TREATMENT PLANT DUAL PIPE SCHEME 350 NARRE WARREN RD	CRANBOURNE EAST	08/02/2018	53V Audit recommendations	Premise Match	849m	North East
74974-1	8005311	1591 SOUTH GIPPSLAND HWY, CRANBOURNE EAS 1591 SOUTH GIPPSLAND HWY	1591 SOUTH GIPPSLAND HWY, CRANBOURNE EAS 1591 SOUTH GIPPSLAND HWY	CRANBOURNE EAST	16/11/2018	53X Statement	Premise Match	877m	North West
68515-9	8004360	Forest audit program and the assessment of forest coupe plans located in State Forests within the Central, Dandenong and Bendigo Forest Management Areas. Note. Lotsearch cannot obtain the specific locations of the coupes being assessed	DANDENONG VIC 3175	DANDENONG	11/02/2015	53V Audit recommendations	Area Match	891m	West

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

EPA Records

Devon Road, Cranbourne East, VIC 3977

EPA Groundwater Zones with Restricted Uses

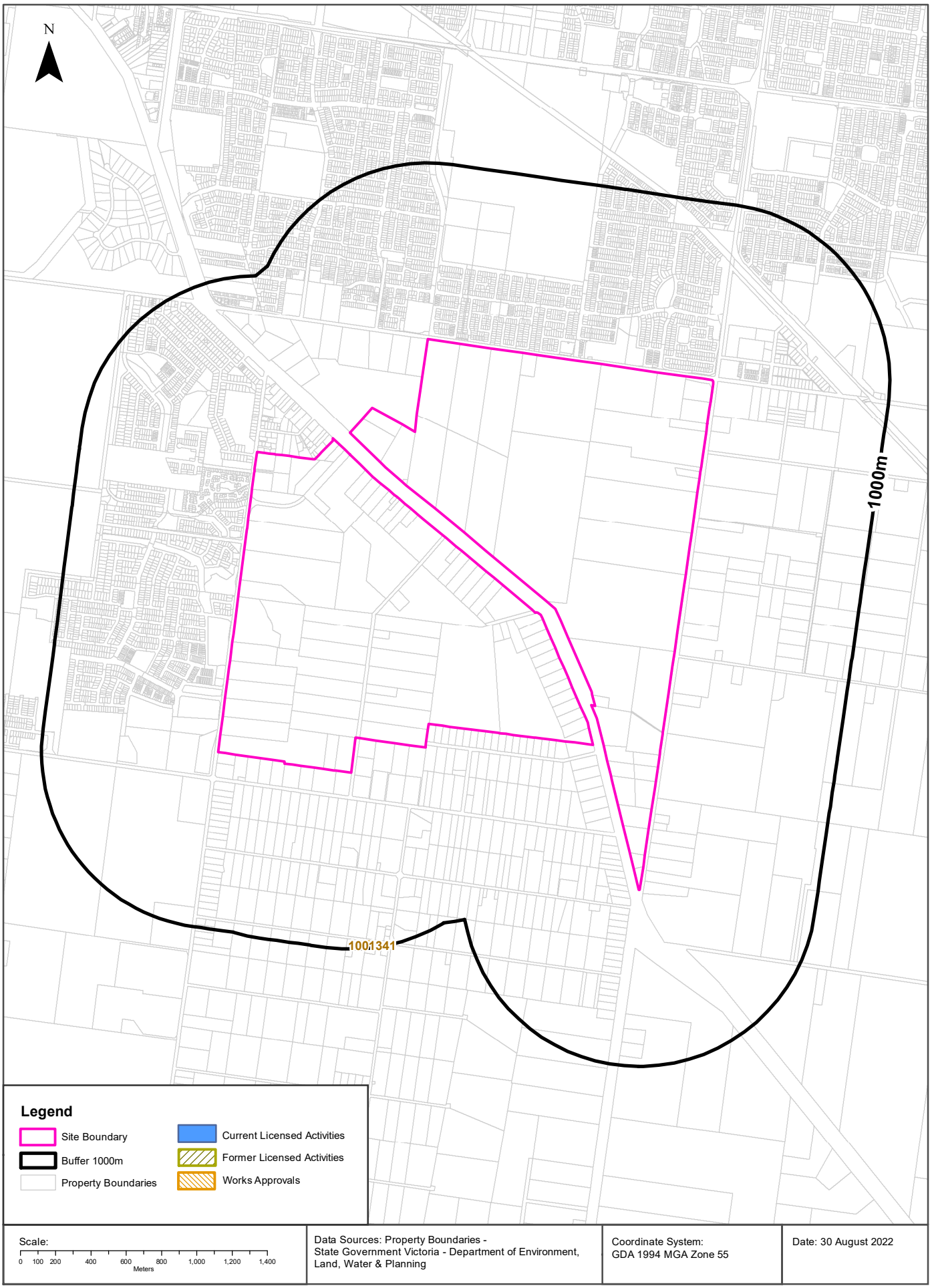
EPA GQRUZ records that exist within the dataset buffer:
Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Status	Loc Conf	Distance	Direction
74974-1	7001833	Commercial	1591 SOUTH GIPPSLAND HWY CRANBOURNE EAST VIC 3977	Drinking water Irrigation of crops (including domestic gardens) and parks Livestock water supply Water used for recreational purposes (e.g. swimming)	Current EPA list	Premise Match	877m	North West

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

EPA Records - Licensed Activities & Works Approvals

Devon Road, Cranbourne East, VIC 3977



EPA Activities

Devon Road, Cranbourne East, VIC 3977

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

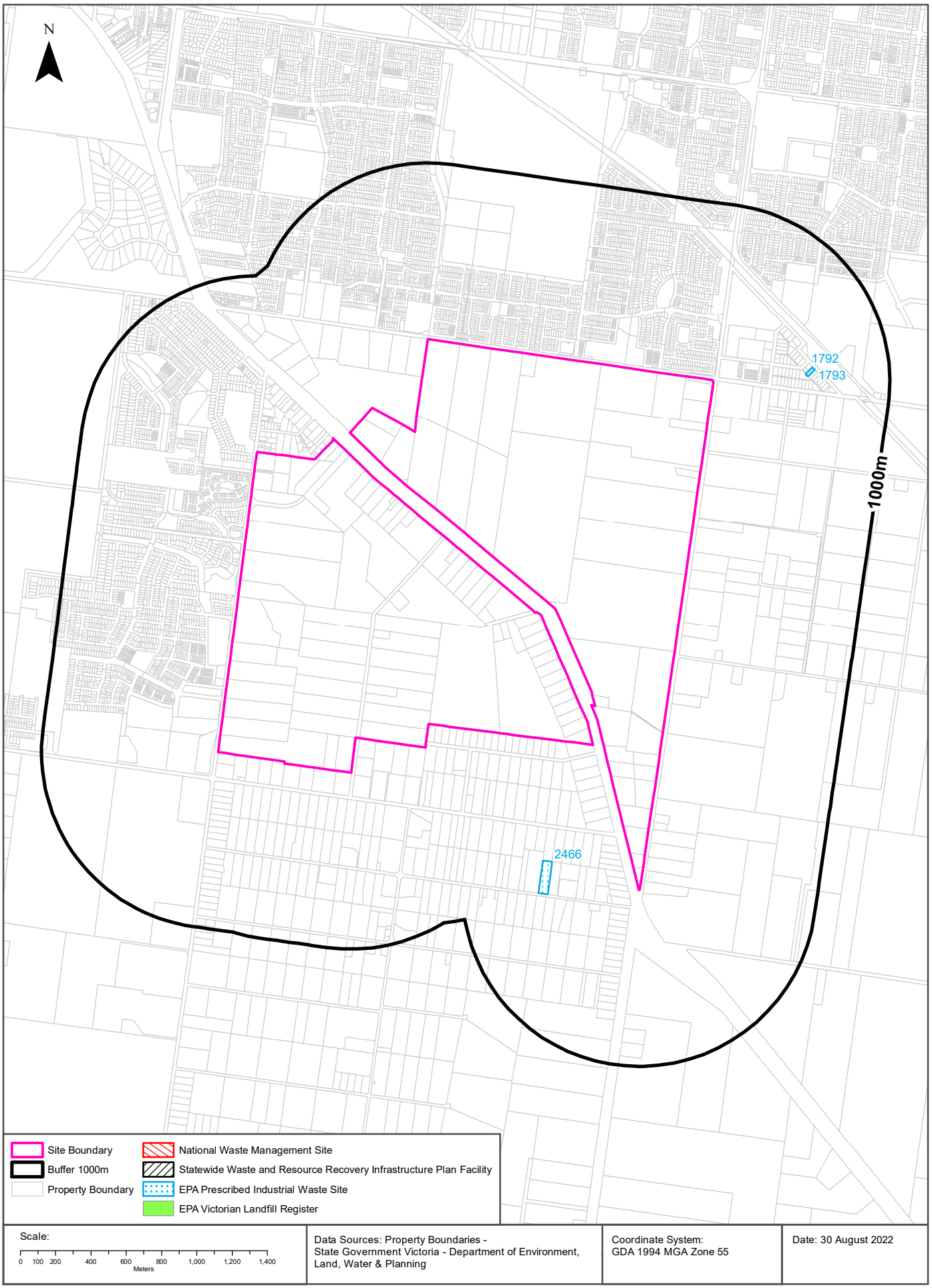
EPA works approvals that exist within the dataset buffer:

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
1001341	Approved/ Issued	81758	DEP OF EDUCATION & EARLY CHILDHOOD DEVEL	50 WORTHING RD DEVON MEADOWS VIC 3977	DEVON MEADOWS	A03 Sewage Treatment	Premise Match	958m	South

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

Waste Management Facilities and Landfills

Devon Road, Cranbourne East, VIC 3977



Waste Management Facilities & Landfills

Devon Road, Cranbourne East, VIC 3977

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
N/A	No records in buffer											

Waste Management Facilities Data Source: Australian Government Geoscience Australia

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
N/A	No records in buffer								

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)	Dir
2466	PJ COMMUNICATIONS PTY LTD	17 FINSBURY RD	DEVON MEADOWS VIC 3977	No	Yes	No	Current EPA List	Premise Match	443m	South
1792	FEEHAN, VINCENT	16 RAILWAY RD	CLYDE VIC 3978	No	Yes	No	Previous EPA List	Premise Match	521m	North East
1793	LMF TRANSPORT PTY LTD	16 RAILWAY RD	CLYDE VIC 3978	No	Yes	No	Previous EPA List	Premise Match	521m	North East

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

Waste Management Facilities & Landfills

Devon Road, Cranbourne East, VIC 3977

EPA Victorian Landfill Register

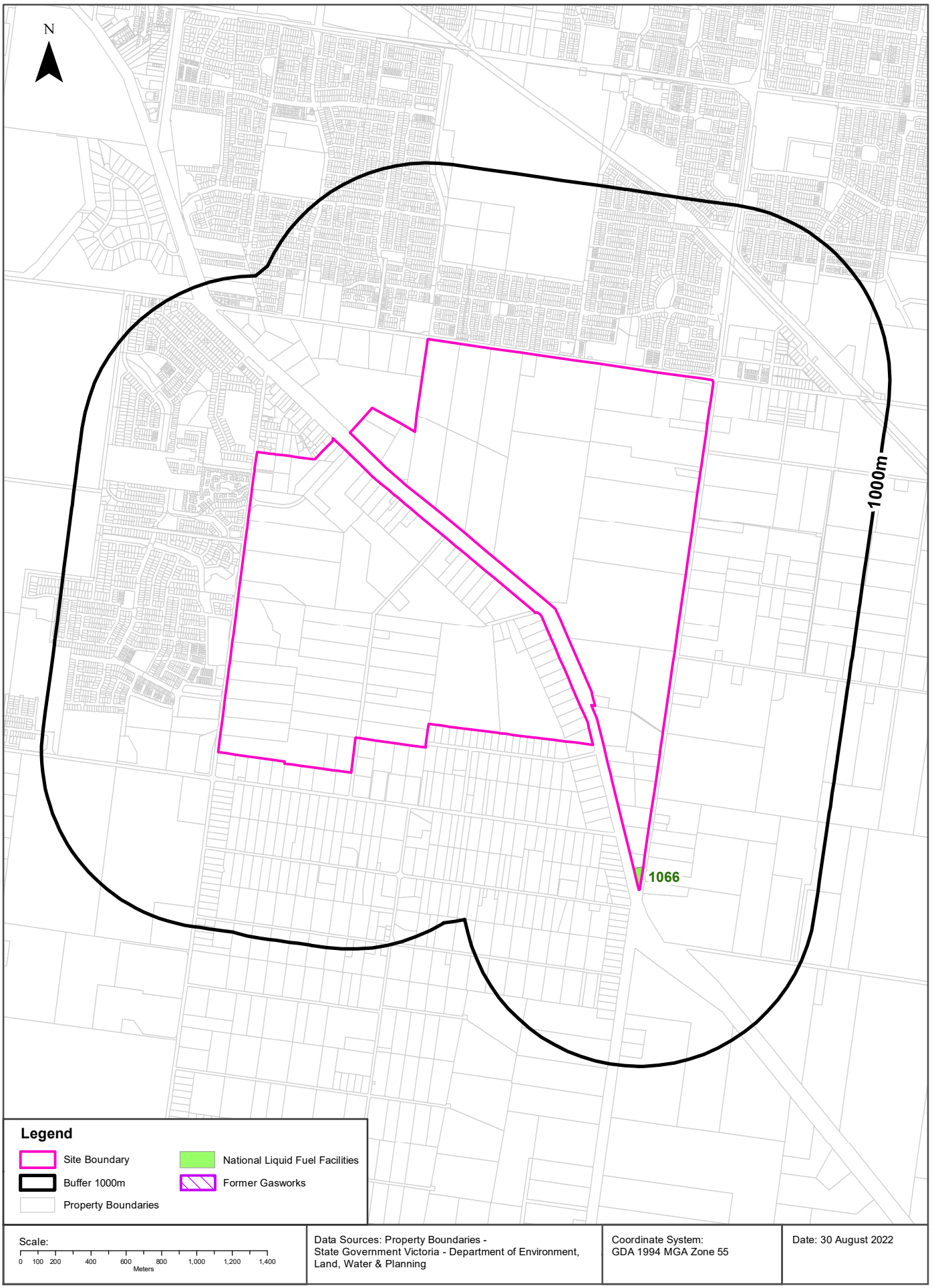
EPA Victorian Landfill Register sites within the dataset buffer:

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

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

Former Gasworks & Liquid Fuel Facilities

Devon Road, Cranbourne East, VIC 3977



Former Gasworks and Liquid Fuel Facilities

Devon Road, Cranbourne East, VIC 3977

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

National Liquid Fuel Facilities

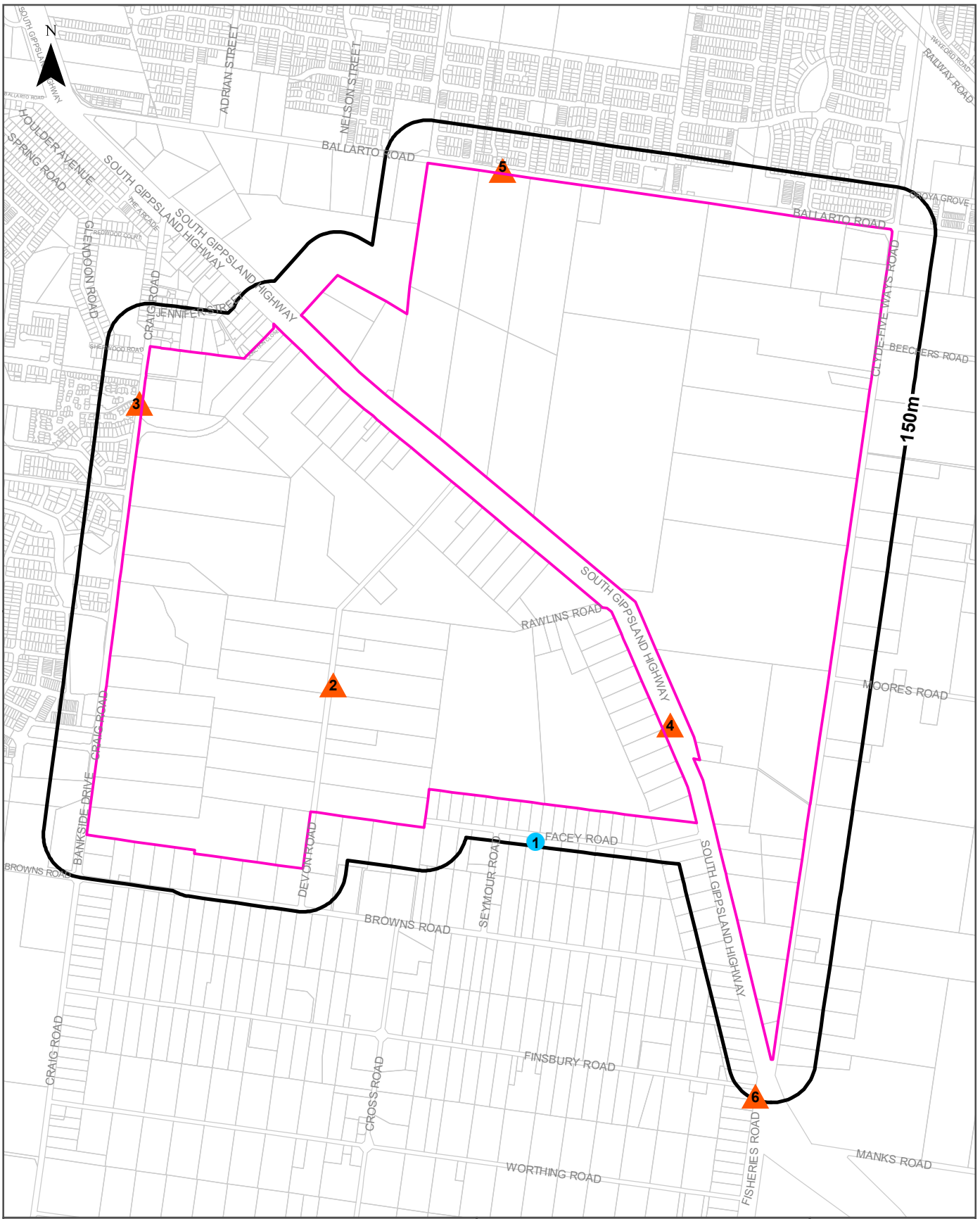
National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist (m)	Direction
1066	7-Eleven Pty Ltd	Five Ways	South Gippsland Highway	Cranbourne	Petrol Station	Operational		13/07/2012	Premise Match	0m	On-site

National Liquid Fuel Facilities Data Source: Geoscience Australia

Historical Business Directories

Devon Road, Cranbourne East, VIC 3977



Legend

- Site Boundary
- Buffer 150m
- Property Boundary
- 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

Scale: 0 250 500 750 1,000 Meters

Coordinate System: GDA 1994 MGA Zone 55

Date: 30 August 2022

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Sands & McDougall's Directory - Digitised by State Library Victoria
Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2022

Historical Business Directories

Devon Road, Cranbourne East, VIC 3977

Business Directory Records 1905-1991
Premise or Road Intersection Matches

Universal Business Directory and Sands & McDougall Directory records, from years 1991, 1980, 1970, 1960, 1950, 1945, 1925 & 1905, 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
1	Caterers.	Regency Catering Services. 18 Facey Rd. Devon Meadows. 3977	82759	1991	Premise Match	121m	South
	Party Hiring Services.	Regency Catering Services. 18 Facey Rd., Devon Meadows. 3977	84209	1991	Premise Match	121m	South
	Party Hiring Services.	Regency Catering Services., 18 Facey Rd ., Devon Meadows. 3977	87218	1991	Premise Match	121m	South
	Caterers	Regency Catering Services., 18 Facey Rd., Devon Meadows. 3977.	84850	1991	Premise Match	121m	South

Business Directory Records 1905-1991
Road or Area Matches

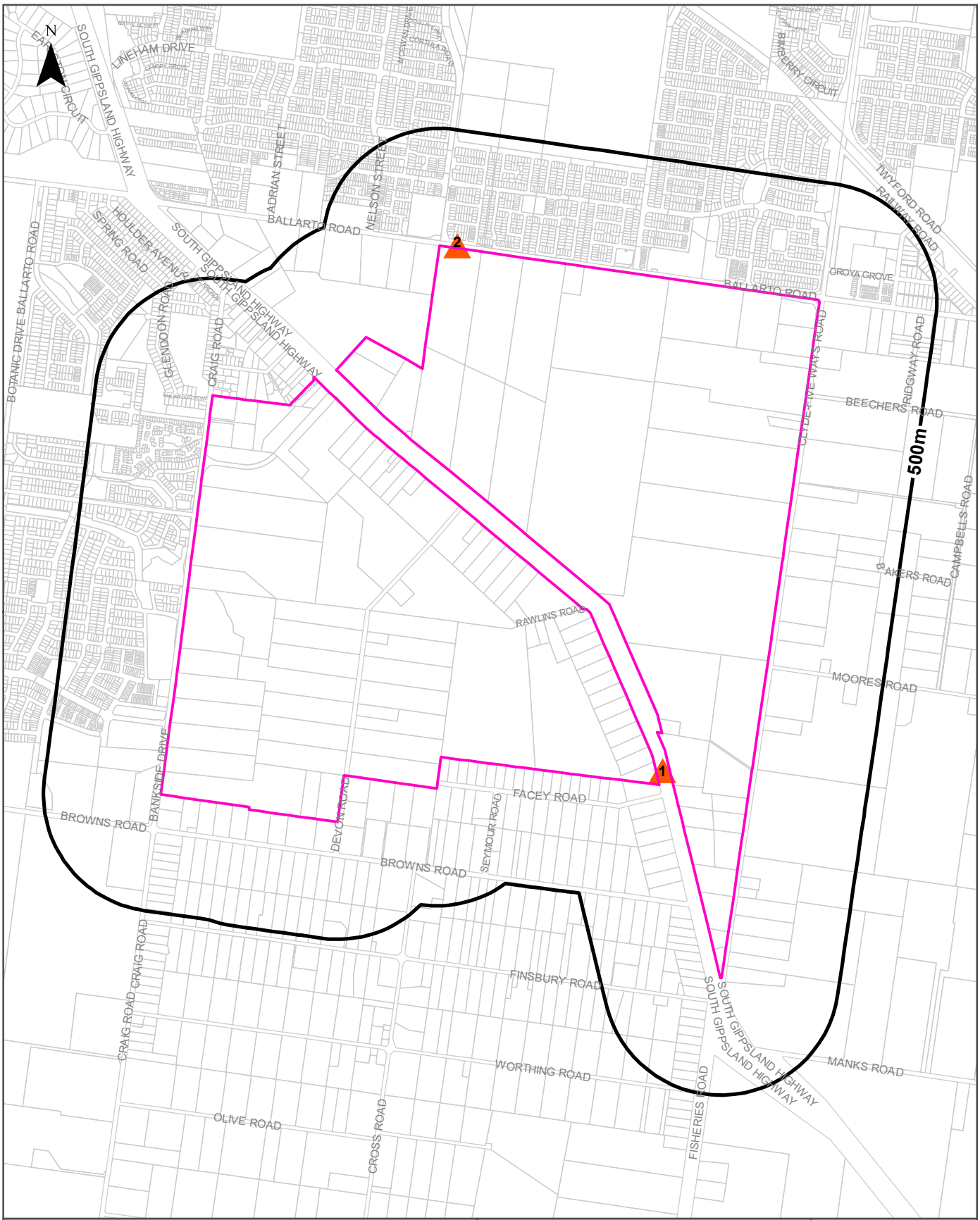
Universal Business Directory and Sands & McDougall Directory records, from years 1991, 1980, 1970, 1960, 1950, 1945, 1925 & 1905, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
2	Gravel, Sand &/Or Soil Supplies.	Castal Moulding Sand Pty. Ltd, Devon Rd, Five Ways. 3977.	83030	1991	Road Match	0m
	Sand, Soil & Gravel Supplies.	Castel Moulding Sand Pty Ltd., Devon Rd., Five Ways. Cranbourne 3977.	87318	1991	Road Match	0m
	Justices Of The Peace.	Mcneil, J., Lot 1. Devon Rd., Devon Meadows 3977.	86086	1991	Road Match	0m
	Justices Of The Peace.	Mcneil. J, Lot 1. Devon Rd., Devon Meadows. 3977.	83112	1991	Road Match	0m
	PLUMBERS	McNeil, J., Devon Rd. Five Ways	41576	1970	Road Match	0m
3	Drainage &/Or Sewerage Contractors.	Dyer, M, Nunkeri. Craig Rd. Fiveways, Cranbourne. 3977	82867	1991	Road Match	0m
	Drainage &/Or Sewerage Contractors.	Dyer, M., Nunkeri, Craig Rd., Five Ways., Cranbourne. 3977.	85840	1991	Road Match	0m
	Plumbers, Gasfitters &/Or Drainlayers.	Dyer, M., Nunkeri., Craig Rd., Five Ways, Cranbourne. 3977	87250	1991	Road Match	0m
	Plumbers &/Or Gasfitters.	Dyer. M., Nunkeri, Craig Rd. Fiveways. Cranbourne 3977	84239	1991	Road Match	0m
4	Motor Engineers.	Fiveways Service Station. South Gippsland H'Way, Devon Meadows. 3977	84094	1991	Road Match	0m
	Motor Garages & Service Stations.	Fiveways Service Station. South Gippsland H'Way., Devon Meadows. 3977	84117	1991	Road Match	0m
	Motor Engineers	Fiveways Service Station., South Gippsland H'way., Devon Meadows. 3977.	87082	1991	Road Match	0m
	Motor Garages & Service Stations.	Fiveways Service Station., South Gippsland H'way., Devon Meadows. 3977.	87109	1991	Road Match	0m
	Septic Tank Mfrs. &/Or Dists.	Munckhof, J & S., South Gippsland H'way., Devon Meadows. 3977.	87345	1991	Road Match	0m
	Septic Tank Mfrs. &/Or Installers &/Or Specialists.	Munckhof, J. & S. South Gippsland H'Way., Devon Meadows. 3977.	84328	1991	Road Match	0m
	Tank &/Or Tankstand Mfrs. &/Or Dists.	Munckhof, J. & S., South Gippsland H'Way., Devon Meadows. 3977.	84409	1991	Road Match	0m
	Tank Makers - Concrete.	Munckhof, J. & S., South Gippsland H'way., Devon Meadows. 3977.	87434	1991	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Five Ways Store & Post Office., South Gippsland Hwy. Dive Ways	41573	1970	Road Match	0m
	MOTOR SERVICE STATIONS	Stubbing Auto Body Repairs (Redg.)., Sth. Gippsland Hwy. Dive Ways	41574	1970	Road Match	0m
	POULTRY FARMS	Wattle Poultry Farm., South Gippsland Hwy. Dive Ways	41577	1970	Road Match	0m
	MOTOR SERVICE STATIONS	Stubbing Auto Body Repairs (Redg.) Sth Gippsland Hwy., Five Ways	107766	1960	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Gibson & Waugh, South Gippsland Highway (See also Cranbourne)., Five Ways	105690	1950	Road Match	0m
5	Dry Cleaners, Pressers &/Or Dyers	Brumby, R. E. Ballarto Rd. Cranbourne. 3977	168217	1980	Road Match	0m
	CARRIERS &/OR CARTAGE CONTRACTORS.	Lackmann, B. E., Ballarto Rd., Cranbourne	13369	1980	Road Match	0m
	CARRIERS & CARTAGE CONTRACTORS	Stevenson Bros., Bularto Rd. Cranbourne	41406	1970	Road Match	0m
	SAND PITS	Stevenson Bros., Bularto Rd. Cranbourne	41499	1970	Road Match	0m
	SAND. SOIL. GRAVEL & STONE	Stevenson Bros., Bularto Rd. Cranbourne	41502	1970	Road Match	0m
6	Carriers &/Or Cartage Contractors.	Jonrose Transport Pty. Ltd. Fisheries Rd., Fiveways. Cranbourne 3977	82754	1991	Road Match	118m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
6	Storage &/Or Distribution Centres.	Jonrose Transport Pty. Ltd., Fisheries Rd Fiveways. Cranbourne 3977	84369	1991	Road Match	118m
	Courier Services.	Jonrose Transport Pty. Ltd., Fisheries Rd. Fiveways. Cranbourne 3977	82781	1991	Road Match	118m
	Carriers &/Or Cartage Contractors	Jonrose Transport Pty. Ltd., Fisheries Road.,Fiveways., Cranbourne. 3977	84842	1991	Road Match	118m
	Courier Services.	Rosrose Transport Pty. Ltd., Fisheries Rd. Fiveways, Cranbourne.3977	85801	1991	Road Match	118m
	Carriers &/Or Cartage Contractors	Rosrose Transport Pty. Ltd., Fisheries Rd. Fiveways., Cranbourne. 3977	84845	1991	Road Match	118m
	Storage & Distribution Centres.	Rosrose Transport Pty. Ltd., Fisheries Rd., Viveways, Cranbourne. 3977,	87394	1991	Road Match	118m
	BUILDERS' SUPPLIES	Ellen, S, O., Fisheries Rd. Five Ways	41571	1970	Road Match	118m
	BUILDERS' SUPPLIES	Ellen, S. G., Fisheries Rd., Five Ways	107763	1960	Road Match	118m

Dry Cleaners, Motor Garages & Service Stations

Devon Road, Cranbourne East, VIC 3977



Legend

- Site Boundary
- Buffer 500m
- Property Boundary
- 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

Scale: 0 310 620 930 1,240 Meters

Coordinate System: GDA 1994 MGA Zone 55

Date: 30 August 2022

Historical Business Directories

Devon Road, Cranbourne East, VIC 3977

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
N/A	No records in buffer						

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.	Fiveways Service Station. South Gippsland H'Way., Devon Meadows. 3977	84117	1991	Road Match	0m
	Motor Garages & Service Stations.	Fiveways Service Station., South Gippsland H'way., Devon Meadows. 3977.	87109	1991	Road Match	0m
	MOTOR SERVICE STATIONS	Stubbing Auto Body Repairs (Redg.)., Sth. Gippsland Hwy. Dive Ways	41574	1970	Road Match	0m
	MOTOR SERVICE STATIONS	Stubbing Auto Body Repairs (Redg.) Sth Gippsland Hwy., Five Ways	107766	1960	Road Match	0m
2	Dry Cleaners, Pressers &/Or Dyers	Brumby, R. E. Ballarto Rd. Cranbourne. 3977	168217	1980	Road Match	0m

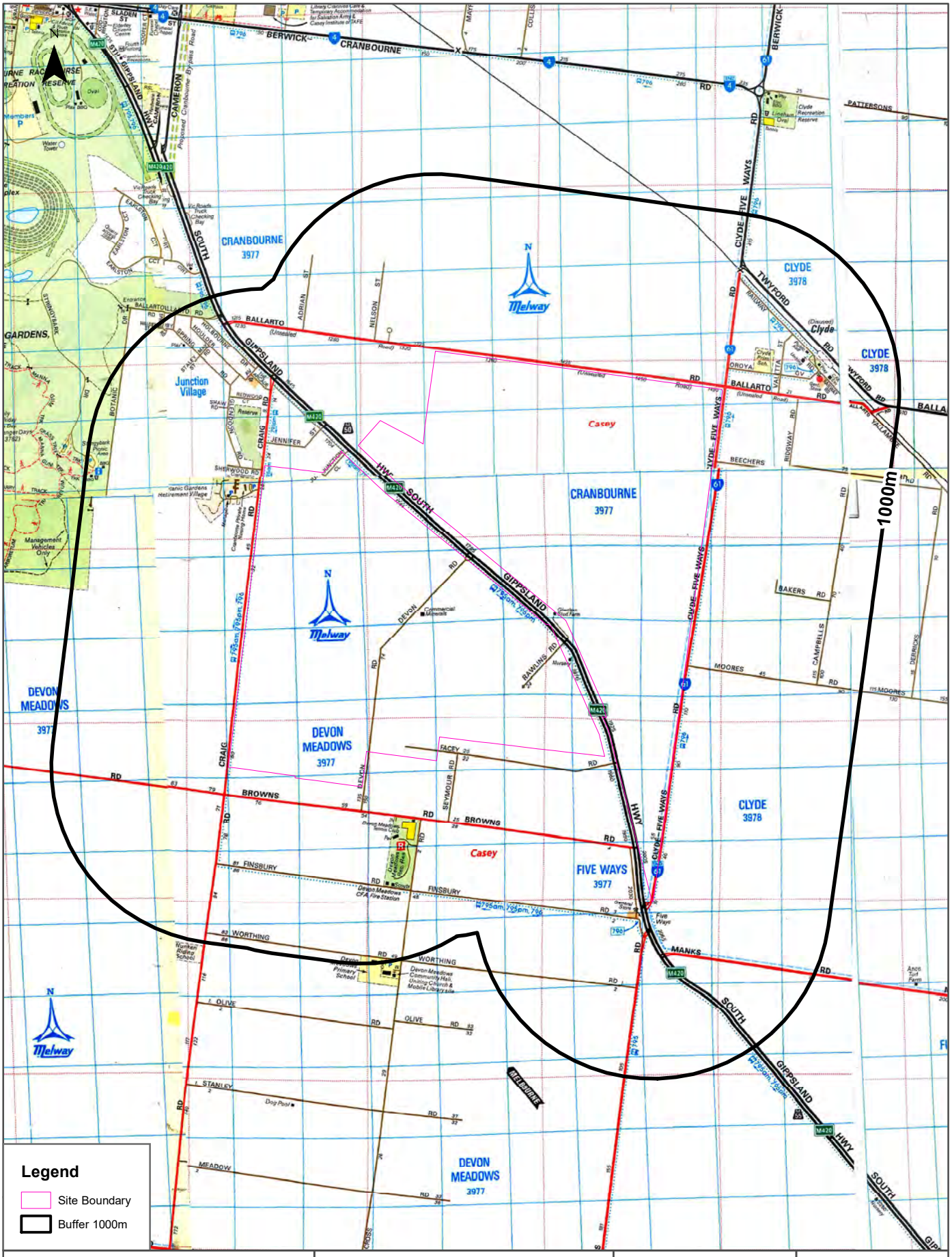
Historical Map 2009

Devon Road, Cranbourne East, VIC 3977

Scale: 0 340 680 1,020 1,360 Meters	Data Sources: Maps reproduced from 2009, Edition 36 of the Melway Street Directory	Coordinate System: GDA 1994 MGA Zone 55	Date: 30 August 2022

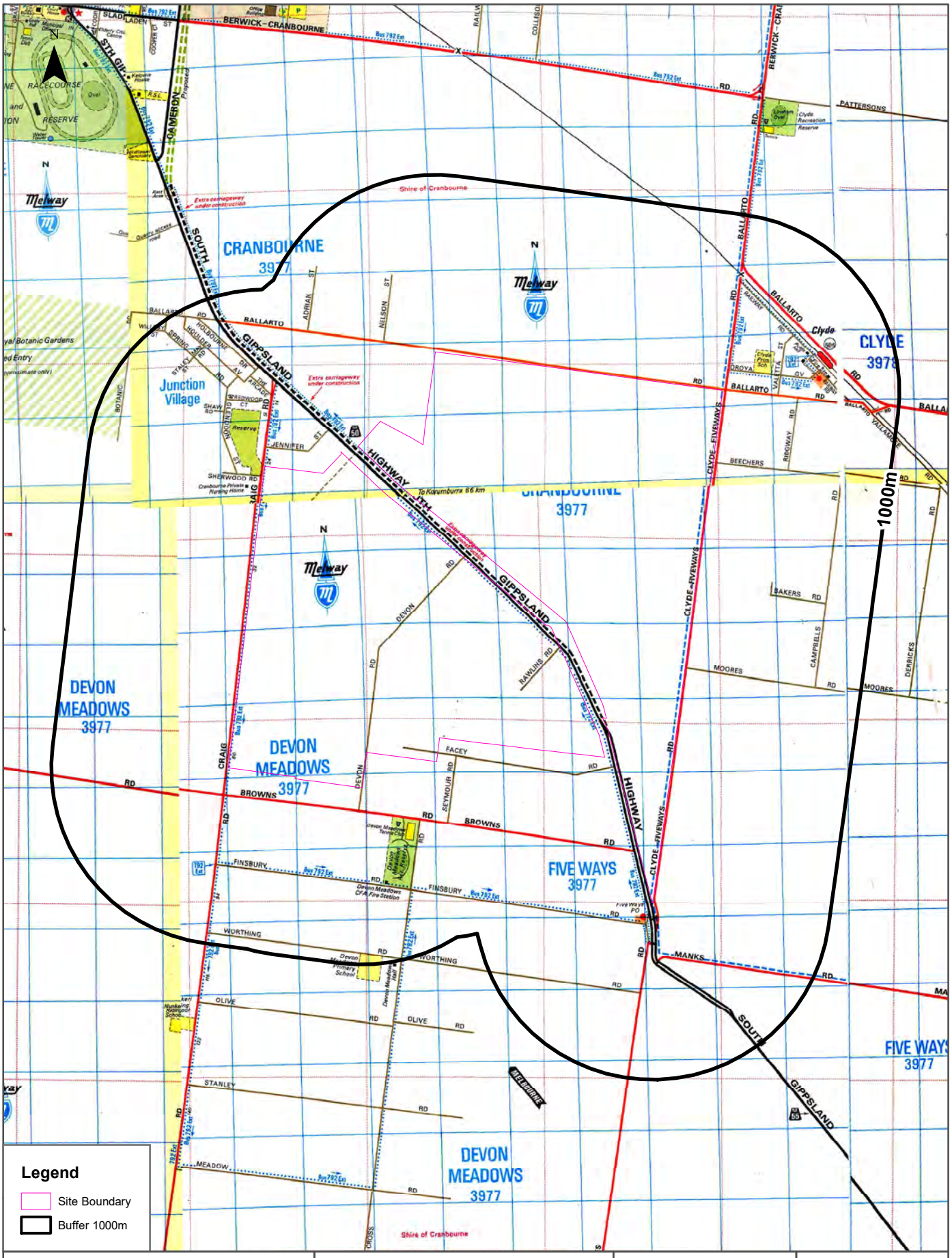
Historical Map 1998

Devon Road, Cranbourne East, VIC 3977



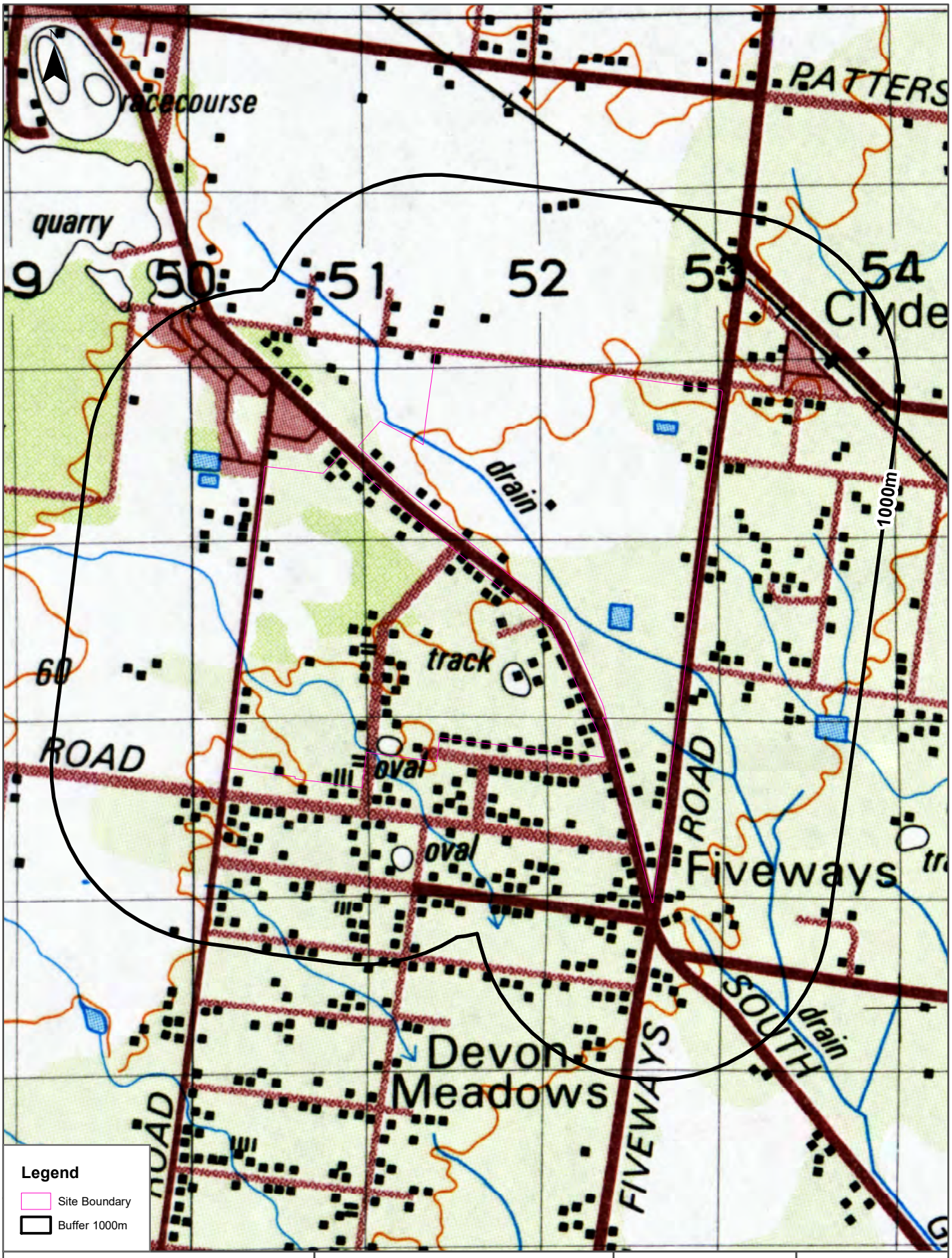
Historical Map 1986

Devon Road, Cranbourne East, VIC 3977



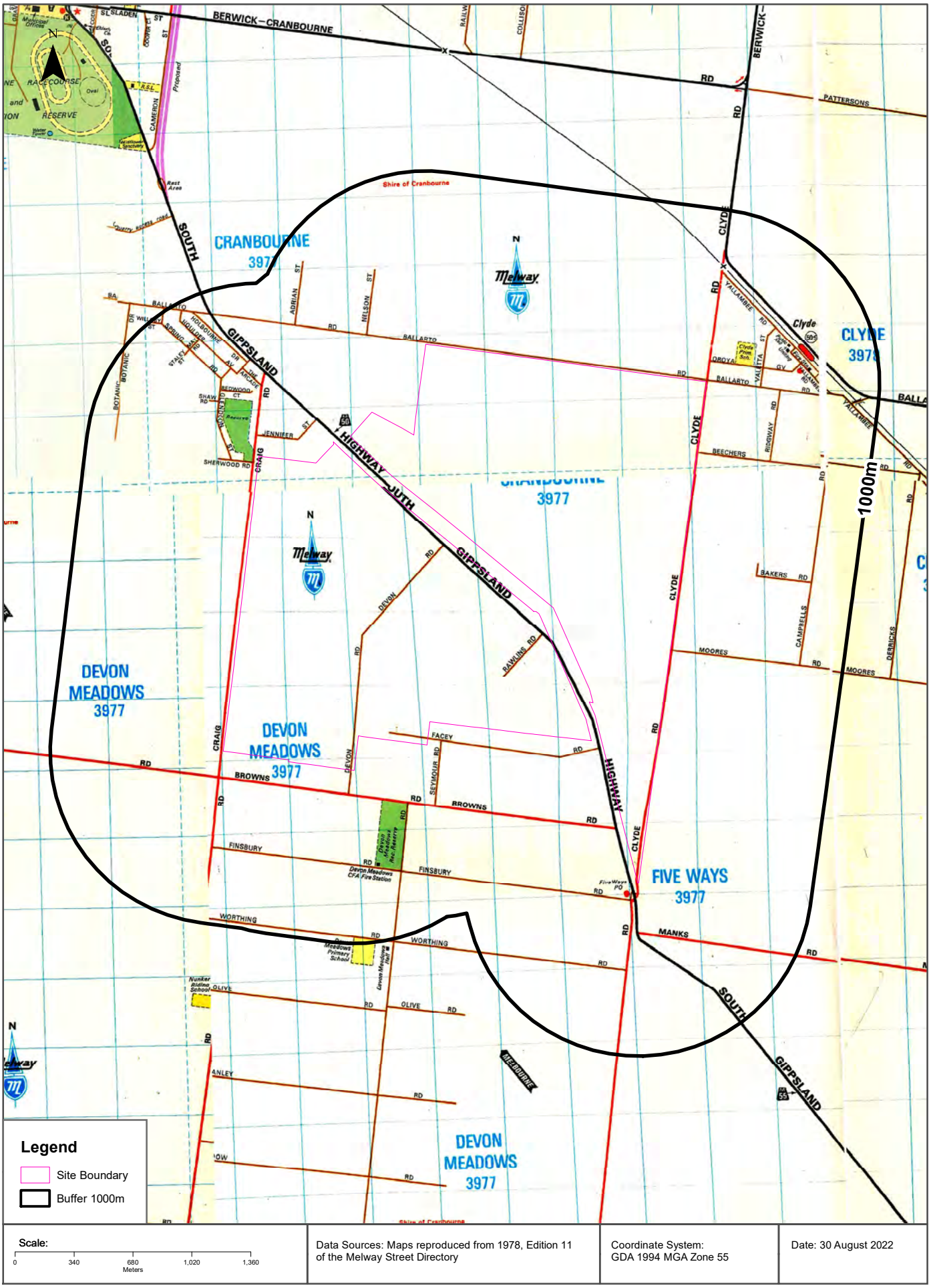
Historical Map 1979

Devon Road, Cranbourne East, VIC 3977



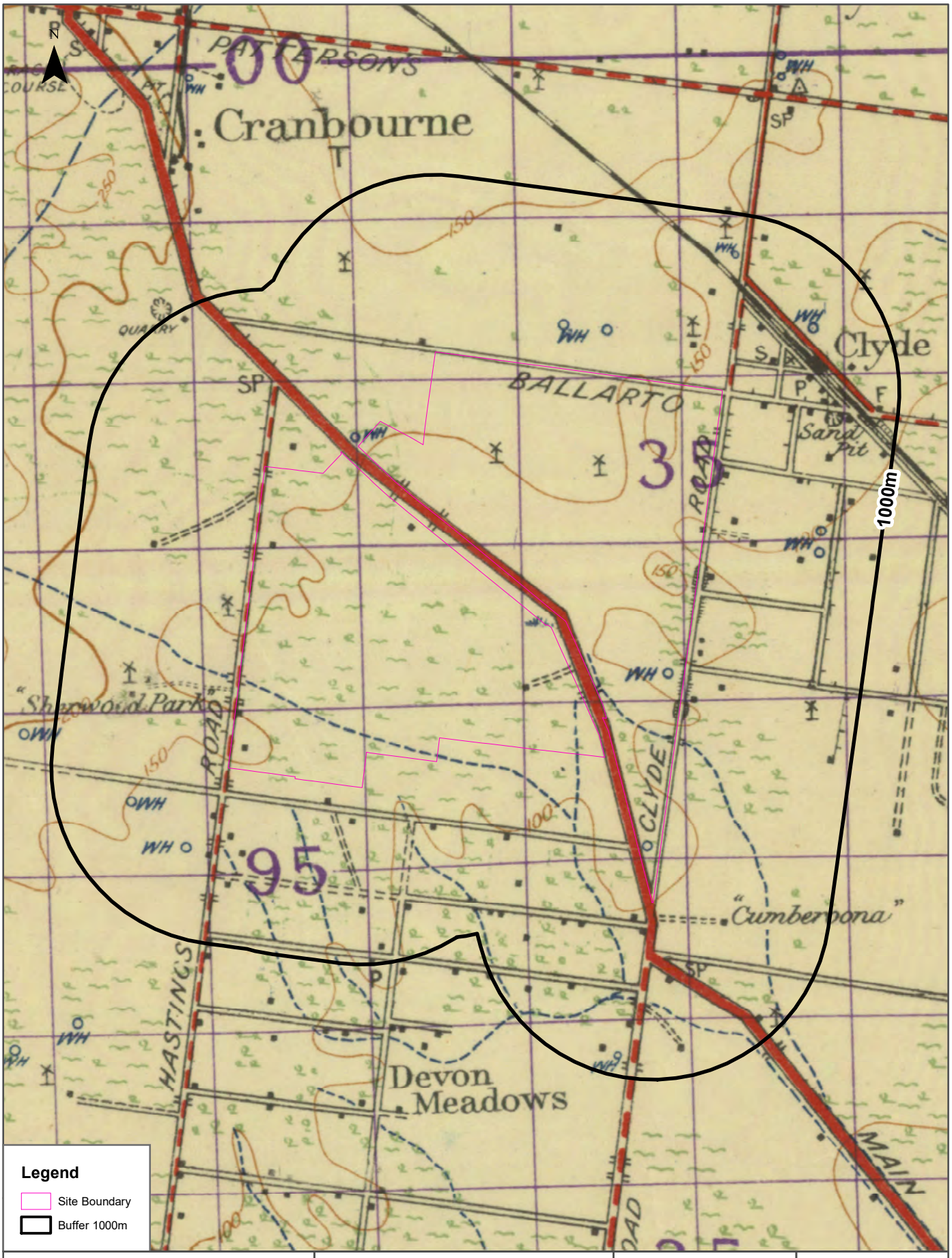
Historical Map 1978

Devon Road, Cranbourne East, VIC 3977



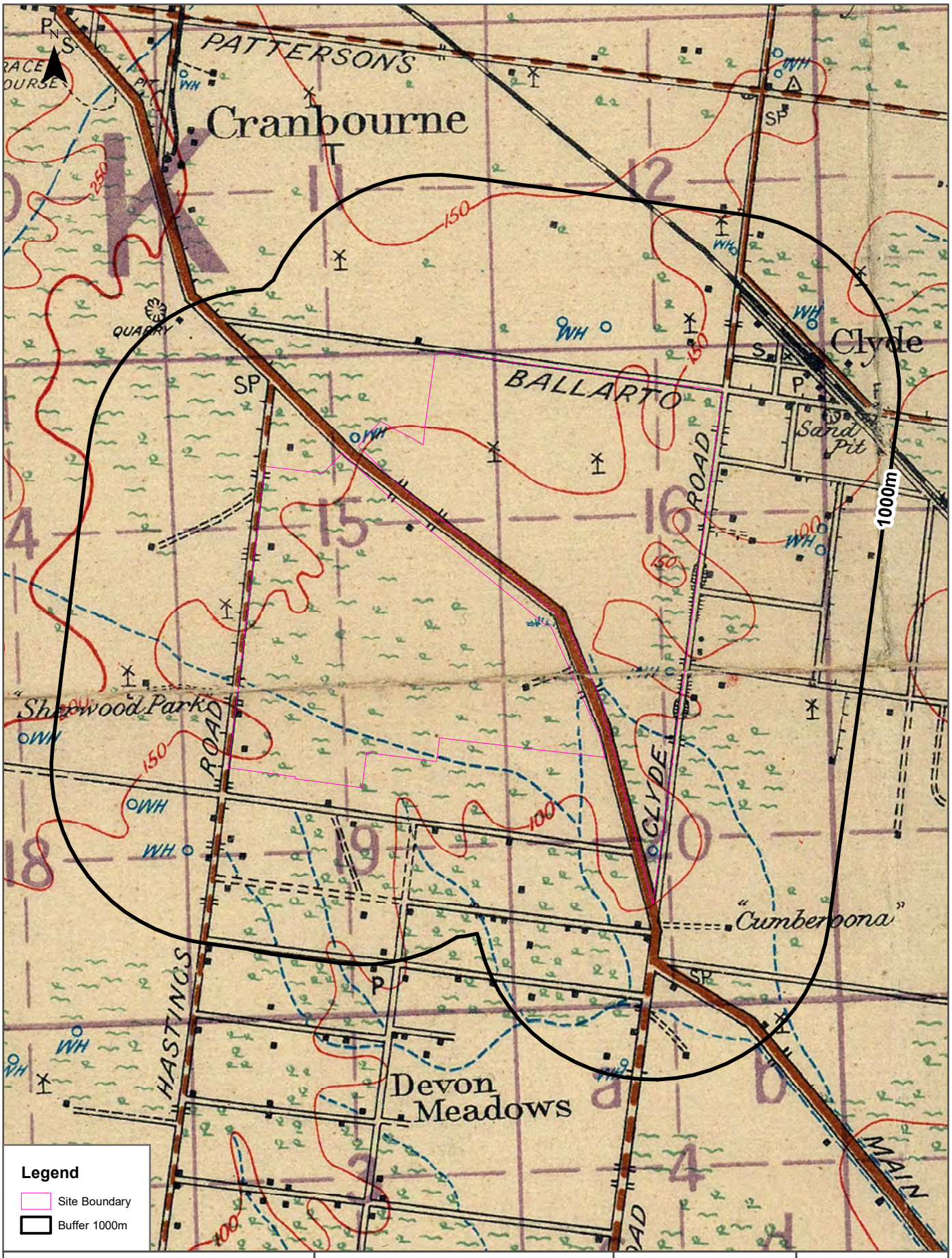
Historical Map c.1938

Devon Road, Cranbourne East, VIC 3977



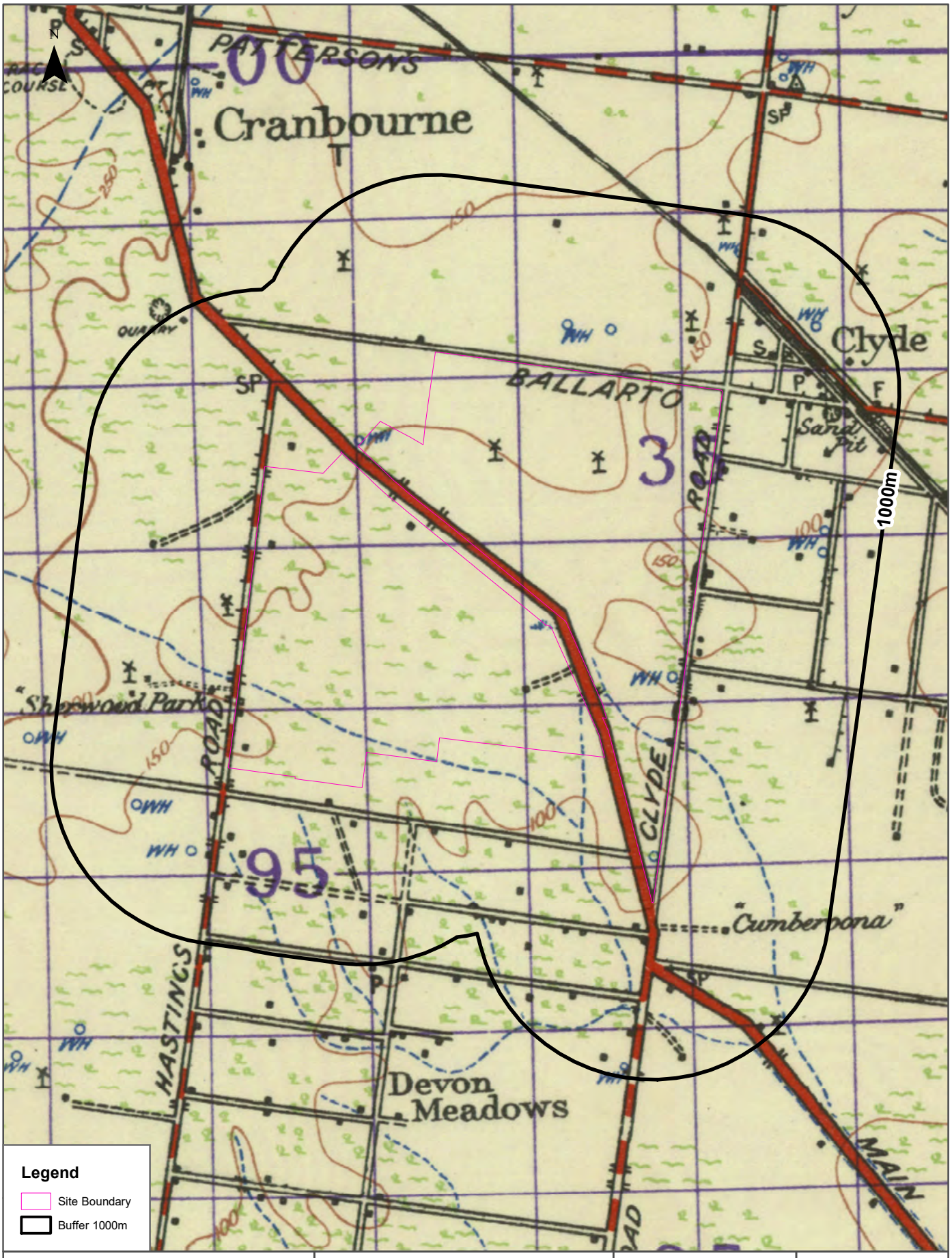
Historical Map c.1925

Devon Road, Cranbourne East, VIC 3977



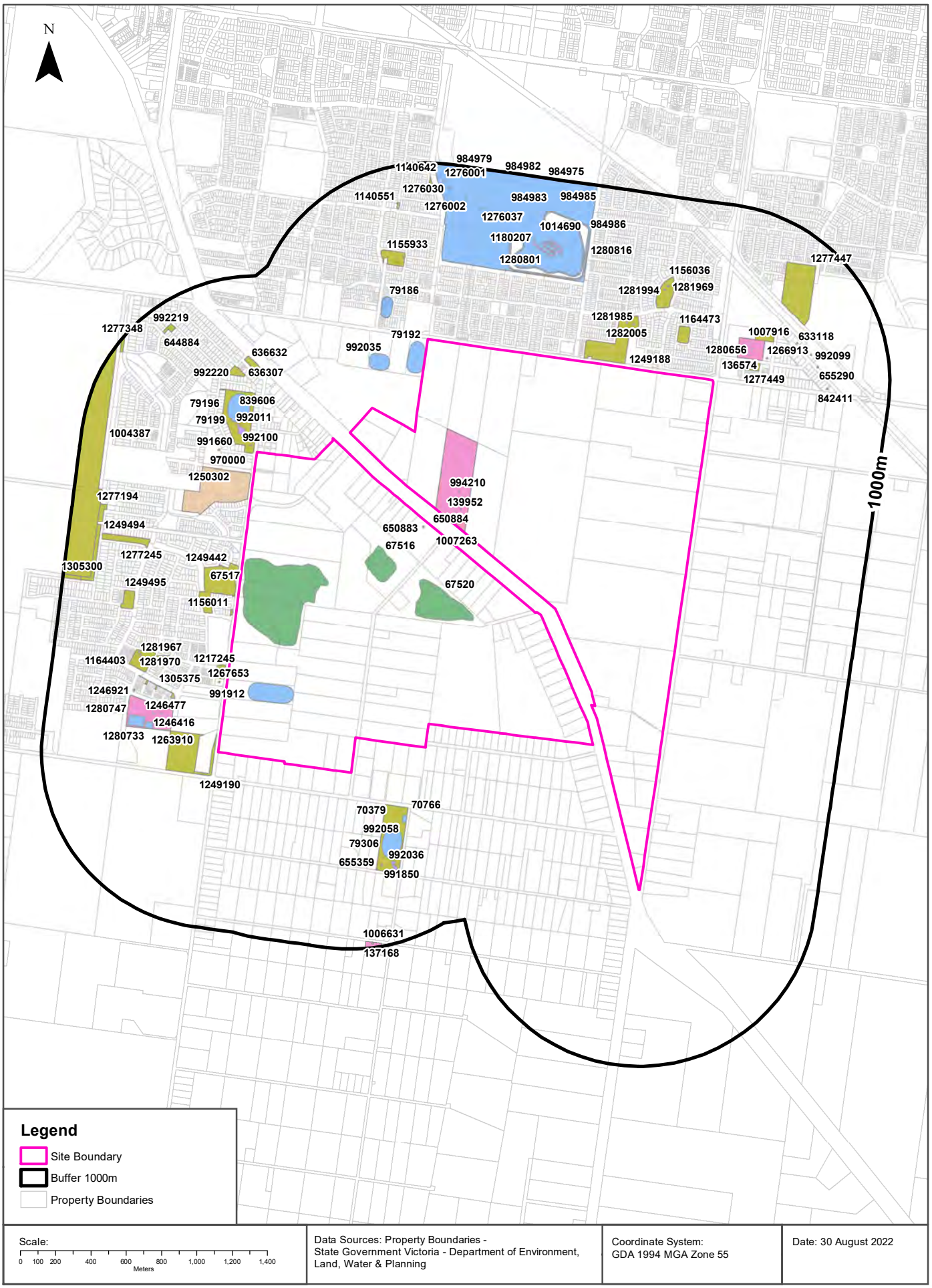
Historical Map c.1924

Devon Road, Cranbourne East, VIC 3977



Features of Interest

Devon Road, Cranbourne East, VIC 3977



Features of Interest

Devon Road, Cranbourne East, VIC 3977

Features of Interest

Features of Interest within the dataset buffer:

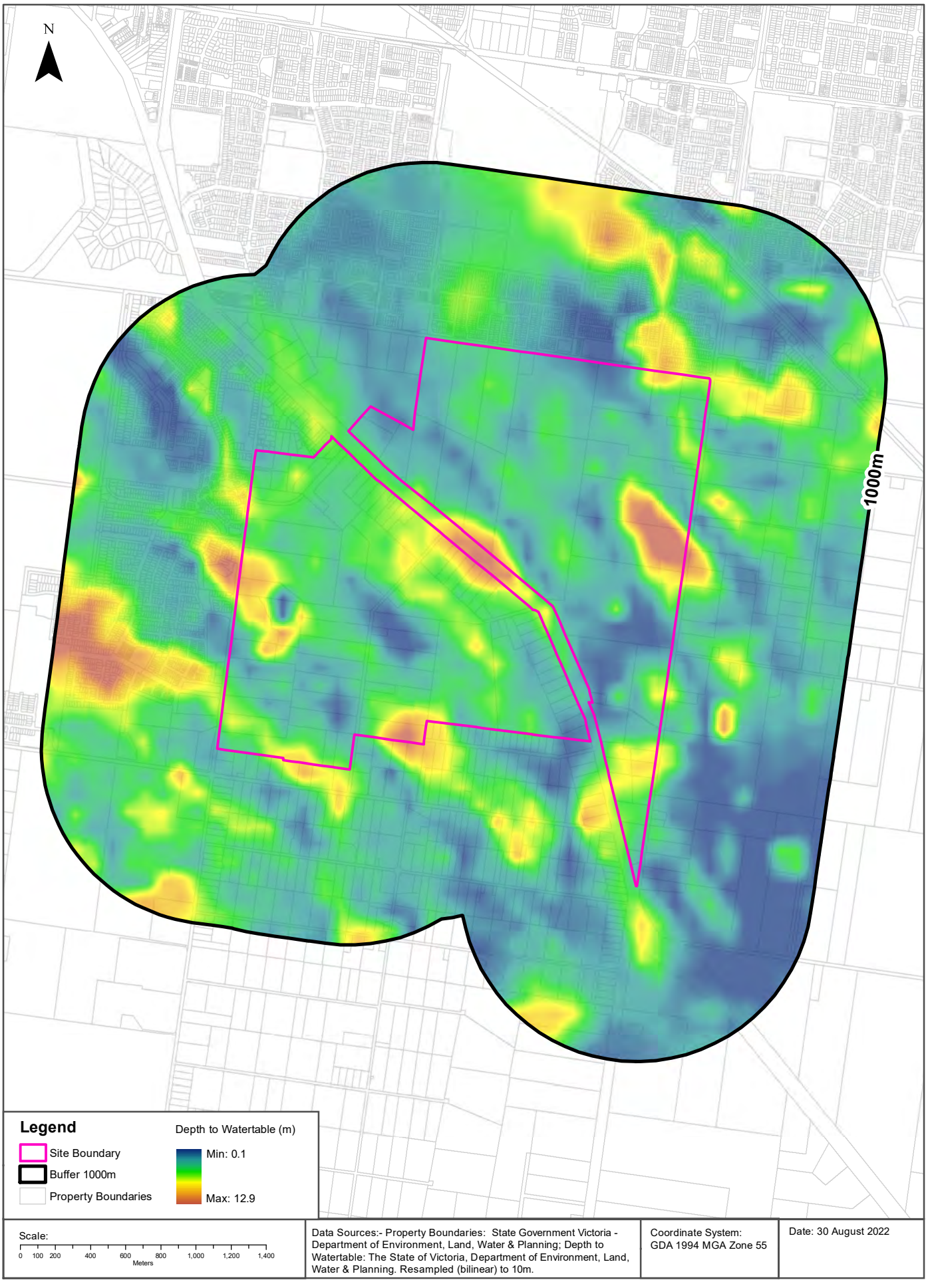
Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
67517	excavation site	quarry		0m	On-site
1007263	education centre	education complex		0m	On-site
67520	excavation site	quarry		0m	On-site
991912	sport facility	training track		0m	On-site
67516	excavation site	quarry		0m	On-site
139952	education centre	primary/secondary school	Lighthouse Christian College Cranbourne	0m	On-site
650883	place of worship	church	The Church Of Jesus Christ Of Latter Day Saint	0m	On-site
650884	place of worship	church	Turning Point Family Church	0m	On-site
994210	care facility	child care	Cranbourne Christian Fellowship Centre Inc T/As Turningpoint Family Church	0m	On-site
79192	sport facility	training track		2m	North
1249188	reserve	park		18m	North East
970000	residential building	retirement village	Aveo Botanic Gardens Retirement Village	19m	West
79196	reserve	park		20m	North West
1249190	reserve	park		21m	South West
1156011	reserve	park		22m	West
1217245	reserve	park		22m	West
1249442	reserve	park		22m	West
1267653	care facility	child care	Inspired Early Learning Centre And Kindergarten	41m	South West
992100	recreational resource	playground		43m	North West
1250302	sport facility	bowling green		108m	West
992011	recreational resource	bmx track		116m	North West
1164473	reserve	park		184m	North East
1007916	education centre	education complex		186m	North East
1277449	reserve	park		190m	North East
79199	sport facility	sports ground		192m	North West
992035	sport facility	training track		196m	North West
991660	care facility	aged care	Regis Cranbourne	212m	North West
136574	education centre	primary school	Clyde Primary School	241m	North East
1281985	recreational resource	picnic site		242m	North East
1282005	recreational resource	playground		248m	North East
79186	sport facility	training track		254m	North

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
70766	reserve	park	Glover Recreation Reserve	262m	South
839606	emergency facility	neighbourhood safer place	Junction Village (Recreation Reserve) NSP	266m	North West
1280656	care facility	child care	Teamkids - Clyde Primary	276m	North East
1263910	education centre	education complex		283m	South West
1305375	reserve	park		284m	West
70379	sport facility	tennis court	Devon Meadows Tennis Club	320m	South
1266913	care facility	child care	Cranbourne Daycare Kindergarten Centre	320m	North East
1277403	reserve	park		328m	North East
1246477	education centre	primary school	Botanic Ridge Primary School	339m	South West
1164387	reserve	park		345m	West
1156036	reserve	park		361m	North East
992058	sport facility	netball court		378m	South
79306	sport facility	sports ground		386m	South
1280733	sport facility	sports ground		386m	South West
1246416	care facility	child care	Botanic Ridge Ps Theircare	389m	South West
1164403	reserve	park		427m	West
636632	reserve	park	The Arcade Reserve	431m	North West
636307	reserve	park	Houlder Avenue Reserve	437m	North West
1280747	sport facility	sports ground		437m	South West
1155933	reserve	park		438m	North
984975	sport facility	sports complex	Casey Fields	449m	North
1280816	sport facility	velodrome		453m	North
1281994	recreational resource	playground		466m	North East
992220	recreational resource	playground		467m	North West
1281969	recreational resource	picnic site		487m	North East
1281967	recreational resource	picnic site		505m	West
633118	community venue	hall	Clyde Public Hall	511m	North East
1246921	care facility	child care	Botanic Ridge Family And Community Centre	513m	West
1281970	recreational resource	playground		514m	West
1277245	reserve	park		537m	West
991850	community venue	hall	1st Devon Meadows Scouts	548m	South
992036	recreational resource	bmx track		554m	South
1280801	recreational resource	bmx track		560m	North
655359	emergency facility	fire station	Devon Meadows Fire Station	562m	South
992099	recreational resource	playground		565m	North East
1277447	reserve	park		585m	North East
1249495	reserve	park		586m	West

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
655290	emergency facility	fire station	Clyde Fire Station	588m	North East
842411	communication service	telephone exchange	Clyde Telephone Exchange	638m	North East
1180207	sign	emergency marker	CAS109	655m	North
1140551	reserve	park		758m	North
1276037	sign	emergency marker	CAS200	776m	North
1014690	sign	emergency marker	CAS108	799m	North
1277194	reserve	park		805m	West
984986	sport facility	sports ground		824m	North
1249494	reserve	park		825m	West
1276002	sign	emergency marker	CAS201	825m	North
644884	reserve	park		834m	North West
1004387	reserve	gardens	Royal Botanic Gardens Cranbourne	844m	West
992219	recreational resource	playground		856m	North West
1276030	sign	emergency marker	CAS202	860m	North
1140642	reserve	park		867m	North
1276001	sign	emergency marker	CAS203	896m	North
1305300	reserve	park		901m	West
984983	sport facility	sports ground		917m	North
1277348	reserve	park		948m	North West
1006631	education centre	education complex		958m	South
984982	sport facility	sports ground		963m	North
137168	education centre	primary school	Devon Meadows Primary School	970m	South
984985	sport facility	sports ground		985m	North
984979	sport facility	athletic field		996m	North

Depth to Watertable

Devon Road, Cranbourne East, VIC 3977



Hydrogeology & Groundwater

Devon Road, Cranbourne East, VIC 3977

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive aquifers of low to moderate productivity	0m	On-site
Fractured or fissured, extensive aquifers of low to moderate productivity	971m	South West

Groundwater Salinity

On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
3,500 - 7,000 mg/l	90
1,000 - 3,500 mg/l	10

Depth to Watertable

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
Less than 5 metres	86
5 to 10 metres	12
10 to 20 metres	<1

Surface Elevation

Approximate on-site Surface Elevation:

Surface Elevation
21 AHDm to 54 AHDm

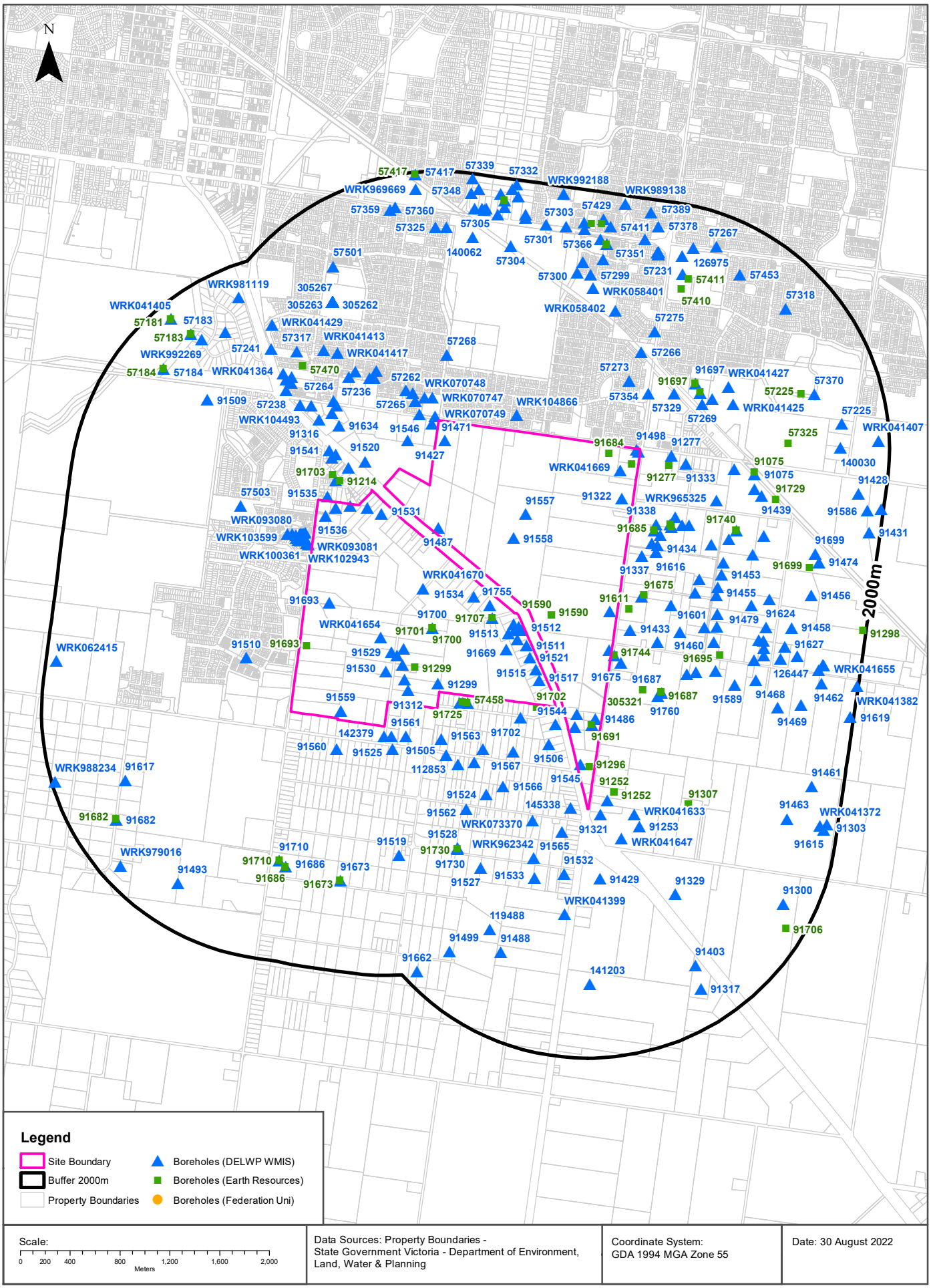
Basement Elevation

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
-54 AHDm to 42 AHDm

Groundwater Boreholes

Devon Road, Cranbourne East, VIC 3977



Groundwater Boreholes

Devon Road, Cranbourne East, VIC 3977

Boreholes (DELWP WMIS)

Boreholes from the Department of Environment, Land, Water & Planning's Water Measurement Information System, within the dataset buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
141860	Domestic, Stock	0.00m-1.00m FINE SAND 1.00m-6.00m ORANGE & GREY SANDY CLAY 6.00m-16.00m VOLCANIC CLAY 16.00m-22.90m WEATHERED BASALT 22.90m-25.00m FINE TO MEDIUM SAND 25.00m-26.00m BROWN COAL & WOOD	-0.50m-26.00m INNER LINING - CASING = Pvc 22.90m-25.60m INNER LINING - SCREEN = Pvc			06/01/1999	0m	On-site
91299	Irrigation		0.00m-45.72m INNER LINING - CASING = Galvanised Iron 12.19m-45.72m INNER LINING - SCREEN = Galvanised Iron		12.19m-45.72m	31/12/1969	0m	On-site
91312	Not Known					31/12/1968	0m	On-site
91322	Stock					31/12/1970	0m	On-site
91346	Domestic					01/01/1970	0m	On-site
91427	Stock					31/12/1966	0m	On-site
91486	Domestic					31/12/1970	0m	On-site
91487	Stock					31/12/1970	0m	On-site
91498	Domestic, Stock					31/12/1970	0m	On-site
91511	Domestic					31/12/1965	0m	On-site
91512	Domestic					31/12/1964	0m	On-site
91513	Domestic					31/12/1966	0m	On-site
91514	Domestic, Stock					31/12/1964	0m	On-site
91515	Domestic					31/12/1970	0m	On-site
91517	Domestic					31/12/1966	0m	On-site
91518	Domestic					31/12/1952	0m	On-site
91521	Domestic					31/12/1965	0m	On-site
91522	Domestic					31/12/1966	0m	On-site
91523	Domestic, Stock					31/12/1970	0m	On-site
91526	Domestic, Stock		0.00m-18.29m INNER LINING - CASING = Galvanised Iron 18.29m-19.81m INNER LINING - SCREEN = Galvanised Iron		18.29m-19.81m Sandstone	31/12/1965	0m	On-site
91529	Domestic					31/12/1970	0m	On-site
91530	Domestic					31/12/1963	0m	On-site
91531	Domestic					31/12/1970	0m	On-site
91534	Stock					31/12/1970	0m	On-site

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
91536	Domestic					31/12/1970	0m	On-site
91537	Stock					31/12/1970	0m	On-site
91538	Domestic					31/12/1966	0m	On-site
91543	Domestic					31/12/1970	0m	On-site
91544	Domestic					31/12/1970	0m	On-site
91545	Domestic					31/12/1965	0m	On-site
91557	Stock					31/12/1965	0m	On-site
91558	Stock					31/12/1969	0m	On-site
91559	Stock					31/12/1970	0m	On-site
91669	Domestic	0.00m-0.20m TOPSOIL 0.20m-1.00m DRIFTY SAND 1.00m-4.00m GREY CLAY 4.00m-9.00m ORANGE CLAY 9.00m-9.30m FINE ORANGE SAND 9.30m-10.80m IRONSTONE	0.00m-6.30m INNER LINING - CASING = Pvc 6.30m-10.80m INNER LINING - SCREEN = Pvc		6.30m-10.80m Ironstone	19/01/1981	0m	On-site
91691	Domestic, Stock	14.32m-25.90m YELLOW SANDSTONE 25.90m-30.48m MUDSTONE	0.00m-1.53m INNER LINING - CASING = Galvanised Iron 1.53m-30.48m INNER LINING - SCREEN = Galvanised Iron		1.53m-30.48m Sandstone	21/02/1982	0m	On-site
91693	Domestic, Stock	0.00m-0.46m GREY BROWN SAND 0.46m-2.44m BROWN GREY CLAY 2.44m-3.96m BROWN GREY REDDISH CLAY 3.96m-10.67m GREY AND BROWN MUDSTONE CLAY 10.67m-26.82m BURNT SANDSTONE 26.82m-27.43m MUDSTONE	0.00m-12.50m INNER LINING - CASING = Galvanised Iron 12.50m-27.43m INNER LINING - SCREEN = Galvanised Iron		12.50m-27.43m Sandstone	09/03/1983	0m	On-site
91700	Not Known	0.00m-0.30m FINE SANDY TOPSOIL 0.30m-1.40m FINE GREY SAND 1.40m-4.30m FINE TACKY ORANGE SAND 4.30m-6.00m GREY CLAY WITH RED STREAKS 6.00m-11.30m ORANGE AND GREY CLAY 11.30m-14.70m SANDSTONE 14.70m-15.08m MUDSTONE (BASE ROCK)	-0.45m-11.33m INNER LINING - CASING = Galvanised Iron 11.30m-12.50m INNER LINING - SCREEN = Galvanised Iron		11.30m-12.50m Sandstone	11/08/1983	0m	On-site
91707	Not Known	0.00m-1.20m SAND 1.20m-4.00m HARD YELLOW CLAY 4.00m-7.00m FIRM GREY CLAY 7.00m-9.00m HARD CLAY AND STONE 9.00m-17.00m DECOMPOSED BASALT 17.00m-19.00m FIRM WEATHERED BASALT 19.00m-20.00m HARD BASALT 20.00m-23.00m MUDSTONE 23.00m-23.70m COAL, WOOD AND SAND 23.70m-24.00m MUDSTONE				13/01/1984	0m	On-site
91709	Domestic, Stock	0.00m-1.50m TOP SOIL 1.50m-6.70m MOTTLED CLAY GREY/YELLOW 6.70m-14.60m BASALTIC CLAY 14.60m-33.50m HARD BASALT 33.50m-37.40m LIGNIOUS CLAY 37.40m-39.30m AS ABOVE WITH COARSE SAND 39.30m-40.20m COAL 40.20m-43.50m LIG CLAY LIGHT BROWN 43.50m-50.20m SAND AND GRAVEL FINE TO VERY COARSE 50.20m-88.30m MUD STONE	0.00m-61.26m INNER LINING - CASING = Galvanised Iron 0.00m-88.30m INNER LINING - SCREEN = Not Known		0.00m-88.30m	03/07/1982	0m	On-site
91755	Domestic	0.00m-0.30m SANDY TOPSOIL 0.30m-5.50m GREY CLAY 5.50m-6.70m SOFT GREY SANDSTONE 6.70m-9.50m GREY MUDSTONE 9.50m-21.80m GREY SANDSTONE 21.80m-22.70m BROKEN GREY SANDSTONE	0.00m-17.00m INNER LINING - CASING = Pvc 17.00m-22.70m INNER LINING - SCREEN = Pvc		17.00m-22.70m Sandstone	16/02/1988	0m	On-site
WRK041631	Not Known					31/12/1965	0m	On-site

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK041648	Irrigation		0.00m-12.19m INNER LINING - CASING = Not Known 10.67m-12.19m INNER LINING - SCREEN = Not Known		10.67m-12.19m	31/12/1965	0m	On-site
WRK041654	Irrigation					01/01/1970	0m	On-site
WRK041656	Domestic, Irrigation, Stock	0.00m-0.30m SURFACE SOIL 0.30m-1.23m SAND 1.23m-3.66m CLAY 3.66m-4.49m SANDY CLAY 4.49m-7.01m CLAYEY SAND 7.01m-9.75m BASSAULTIC CLAY 9.75m-10.36m DECOMPOSED BASSAULT 10.36m-12.19m SOFT BASSAULT 12.19m-17.00m BASSAULT	0.00m-10.97m INNER LINING - CASING = Galvanised Iron 10.97m-12.80m INNER LINING - SCREEN = Galvanised Iron		10.97m-12.80m Basalt	11/02/1971	0m	On-site
WRK041669	Irrigation	31.70m-35.97m BASALT 35.97m-45.72m BROWN CLAY AND WOOD 45.72m-48.77m MEDIUM SAND	0.00m-45.72m INNER LINING - CASING = Pvc 45.72m-48.77m INNER LINING - SCREEN = Pvc 34.44m-0.00m OUTER LINING - GRAVEL = Seal		45.72m-48.77m Sand	28/02/1982	0m	On-site
WRK041670	Industrial	0.00m-0.50m FINE BLACK SAND (FILLING) 0.50m-0.60m TOPSOIL 0.60m-2.90m COARSE SANDY ORANGE DRIFT 2.90m-10.50m FIRM GREY AND ORANGE CLAY 10.50m-15.70m GREENY GREY VOLCANIC CLAY 15.70m-16.60m DECOMPOSED BASALT AND CLAY 16.60m-17.50m BASALT PEBBLES AND VOLCANIC CLAY 17.50m-18.00m FIRM BASALT 18.00m-21.00m BROKEN BASALT, PEBBLES AND VOLCANIC CLAY 21.00m-21.60m FINE SOFT LIGNEOUS BROWN CLAY 21.60m-23.30m WEATHERED AND DECOMPOSED HONEYCOMB BASALT 23.30m-23.50m FINE AND MEDIUM FINE SAND 23.50m-26.00m FINE SOFT LIGNEOUS BROWN CLAY 26.00m-28.70m FINE SANDY LIGHT GREY CLAY 28.70m-31.50m FIRM LIGHT GREY SANDSTONE 31.50m-32.10m DARK GREY MUDSTONE 32.10m-0.00m BORE BACKFILLED WITH BLUEMETAL FROM 32.1 TO 26.3 METRES	0.00m-4.20m INNER LINING - CASING = Galvanised Iron 0.00m-22.60m INNER LINING - CASING = Pvc 22.60m-26.30m INNER LINING - SCREEN = Pvc		22.60m-26.30m Basalt	25/08/1983	0m	On-site
WRK091248	Domestic & Stock	0.00m-0.30m TOP SOIL 0.30m-1.50m BLACK SANDY CLAY 1.50m-9.00m ORANGE SANDY CLAY 9.00m-12.00m MOTTLED CLAY 12.00m-14.00m SOFT MUDSTONE 14.00m-33.00m FIRM MUDSTONE	0.00m-16.00m INNER LINING - CASING = Pvc 16.00m-33.00m INNER LINING - SLOT = Pvc 0.00m-2.00m OUTER LINING - GRAVEL = Cement 2.00m-33.00m OUTER LINING - GRAVEL = Gravel			10/01/2016	0m	On-site
91744	Domestic	0.00m-0.70m SANDY LOAM 0.70m-4.50m ORANGE CLAY 4.50m-9.00m YELLOW AND GREY CLAY 9.00m-19.00m VOLCANIC CLAY 19.00m-21.50m SOFT MUDSTONE				19/11/1986	27m	South East
WRK102943	Investigation	0.00m-2.80m SILTY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = Pvc 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	31m	West
91535	Stock					31/12/1970	36m	North West
WRK093081	Investigation	0.00m-3.50m SILTY SAND 3.50m-6.50m SLIGHTLY CLAYEY SAND 6.50m-7.00m SANDY CLAY	0.00m-4.00m INNER LINING - CASING = Pvc 4.00m-7.00m INNER LINING - SCREEN = Pvc 0.00m-3.00m OUTER LINING - GRAVEL = Cement 3.00m-3.50m OUTER LINING - GRAVEL = Bentonite 3.50m-7.00m OUTER LINING - GRAVEL = Gravel			19/10/2017	40m	West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK094587	Investigation	0.00m-3.50m SILTY SAND 3.50m-6.50m SLIGHTLY CLAYEY SAND 6.50m-7.00m SANDY CLAY	0.00m-4.00m INNER LINING - CASING = Pvc 4.00m-7.00m INNER LINING - SCREEN = Pvc 0.00m-3.00m OUTER LINING - GRAVEL = Cement 3.00m-3.50m OUTER LINING - GRAVEL = Bentonite 3.50m-7.00m OUTER LINING - GRAVEL = Gravel			19/10/2017	40m	West
WRK070749	Observation					06/09/2012	42m	North
WRK100364	Investigation	0.00m-2.80m SILTY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = Pvc 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			31/05/2017	48m	West
91471	Domestic, Stock					31/12/1969	51m	North
57458	Domestic	0.00m-0.61m DARK SOIL 0.61m-0.91m GREY SOIL 0.91m-1.37m COFFEE ROCK 1.37m-4.88m GREY BROWN CLAY 4.88m-7.01m YELLOW CLAY AND STONES 7.01m-22.25m YELLOW BROWN SANDSTONE 22.25m-22.86m MUDSTONE	0.00m-10.00m INNER LINING - CASING = Galvanised Iron 10.00m-22.86m INNER LINING - SCREEN = Galvanised Iron		10.00m-22.86m	24/10/1983	56m	South
91725	Domestic	0.00m-0.10m TOPSOIL 0.10m-2.10m FINE BROWN SAND 2.10m-3.70m SANDY GREY CLAY 3.70m-5.20m GREY AND RED SANDY CLAY 5.20m-11.00m CLAY AND SANDSTONE LAYERS 11.00m-14.30m HARD SANDSTONE	0.00m-11.05m INNER LINING - CASING = Galvanised Iron 11.05m-14.30m INNER LINING - SCREEN = Galvanised Iron		11.05m-14.30m Sandstone	27/11/1984	61m	South
132464	Domestic	0.00m-0.30m SURFACE SOIL 0.30m-2.40m CLAY 2.40m-2.70m IRONSTONE 2.70m-4.50m CLAY 4.50m-18.00m SANDSTONE & CLAY LAYERS 18.00m-25.00m GREY SANDSTONE	-0.02m-19.00m INNER LINING - CASING = Pvc 19.00m-25.00m INNER LINING - SCREEN = Pvc 0.00m-0.00m OUTER LINING - GRAVEL = Seal		19.00m-25.00m Sandstone	25/03/1997	63m	South
WRK093083	Investigation	0.00m-2.80m SILTY SAND CLAY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	68m	West
142379	Stock	0.00m-11.00m CLAY 11.00m-15.00m SANDSTONE 15.00m-19.00m MUDSTONE				18/03/1999	78m	South West
WRK100366	Investigation	0.00m-2.80m SILTY SAND CLAY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-0.00m OUTER LINING - GRAVEL = Not Known			30/05/2017	83m	West
WRK991595	Domestic	0.00m-9.00m brown clay 9.00m-30.00m grey mudstone	0.00m-15.00m INNER LINING - CASING = Pvc 15.00m-21.00m INNER LINING - CASING = Pvc 21.00m-27.00m INNER LINING - SLOT = Pvc 27.00m-30.00m INNER LINING - CASING = Pvc 15.00m-16.00m OUTER LINING - GRAVEL = Bentonite			08/06/2009	87m	South East
91675	Domestic, Stock	0.00m-0.61m DARK LOAM SOIL 0.61m-1.22m GREY SANDY SOIL 1.22m-7.01m GREY AND PINKY SANDY CLAY 7.01m-10.36m GREY SANDY CLAY 10.36m-21.34m YELLOW BURNT STONE 21.34m-30.48m DARKER MUDSTONE	0.00m-13.21m INNER LINING - CASING = Galvanised Iron 12.80m-30.48m INNER LINING - SCREEN = Galvanised Iron		12.80m-30.48m	17/01/1981	89m	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK096411	Investigation	0.00m-3.70m SILTY SAND 3.70m-6.90m SANDY SILTY CLAY 6.90m-8.00m SLIGHTLY CLAYEY SILT	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-8.00m OUTER LINING - GRAVEL = Gravel			25/10/2016	94m	West
WRK096410	Investigation	0.00m-3.70m SILTY SAND 3.70m-6.90m SANDY SILTY CLAY 6.90m-8.00m LIGHTLY CLAYEY SILT	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-8.00m OUTER LINING - GRAVEL = Gravel			25/10/2016	95m	West
91561	Stock					31/12/1970	96m	South West
WRK100361	Investigation	0.00m-2.80m SILTY SAND CLAY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	96m	West
WRK096414	Investigation	0.00m-3.70m SILTY SAND 3.70m-6.90m SANDY SILTY CLAY 6.90m-8.00m SLIGHTLY CLAYEY	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-8.00m OUTER LINING - GRAVEL = Gravel			25/10/2016	99m	West
WRK096412	Investigation	0.00m-3.70m SILTY SAND 3.70m-6.90m SANDY SILTY CLAY 6.90m-8.00m SLIGHTLY CLAYEY SILT	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-8.00m OUTER LINING - GRAVEL = Gravel			25/10/2016	101m	West
91321	Domestic, Stock					31/12/1970	107m	South East
WRK096413	Investigation	0.00m-3.70m SILTY SAND 3.70m-6.90m SANDY SILTY CLAY 6.90m-8.00m SLIGHTLY CLAYEY SILT	0.00m-5.00m INNER LINING - CASING = Pvc 5.00m-8.00m INNER LINING - SCREEN = Pvc 0.00m-4.00m OUTER LINING - GRAVEL = Cement 4.00m-4.50m OUTER LINING - GRAVEL = Bentonite 4.50m-8.00m OUTER LINING - GRAVEL = Gravel			25/10/2016	107m	West
WRK093082	Investigation	0.00m-3.70m BROWN TO YELLOW-BROWN SILTY SAND 3.70m-6.90m SILTY SANDY CLAY 6.90m-8.90m SLIGHTLY CLAYEY SILT	0.00m-4.40m INNER LINING - CASING = Pvc 4.40m-8.90m INNER LINING - SCREEN = Pvc 0.00m-3.50m OUTER LINING - GRAVEL = Cement 3.50m-4.00m OUTER LINING - GRAVEL = Bentonite 4.00m-8.90m OUTER LINING - GRAVEL = Gravel		4.40m-8.90m Silt	26/08/2016	109m	West
WRK100362	Investigation	0.00m-2.80m SILTy sand clay sand 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	113m	West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK100363	Investigation	0.00m-2.80m SILTY CLAY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	113m	West
91702	Domestic	0.00m-2.00m FINE SAND 2.00m-13.00m HARD CLAY 13.00m-15.80m SANDSTONE AND LAYERS OF FINE SAND	0.00m-14.50m INNER LINING - CASING = Pvc 14.50m-15.80m INNER LINING - SCREEN = Pvc		14.50m-15.80m Sandstone	19/09/1983	121m	South
WRK041658	Domestic, Industrial, Irrigation, Stock	0.00m-13.72m NOT KNOWN 13.72m-22.86m BASALT 22.86m-24.38m BROWN CLAY AND WOOD 24.38m-24.99m MUDSTONE CLAY	0.00m-13.72m INNER LINING - CASING = Not Known 13.71m-22.86m INNER LINING - SCREEN = Not Known		13.71m-22.86m	22/12/1971	123m	East
WRK104866	Investigation	0.00m-0.30m CLAYey silt 0.30m-3.80m SILTy Clay 3.80m-7.20m CLAYey silt/silty clay 7.20m-9.70m BASALT(EW)	0.00m-6.70m INNER LINING - CASING = Pvc 6.70m-9.70m INNER LINING - SCREEN = Pvc 0.00m-5.70m OUTER LINING - GRAVEL = Cement 5.70m-6.20m OUTER LINING - GRAVEL = Bentonite			13/02/2018	128m	North
145338	Domestic	0.00m-0.40m TOP SOIL 0.40m-7.00m GREY CLAY 7.00m-12.00m VOLCANIC CLAY 12.00m-14.00m SANDSTONE	0.30m-14.00m INNER LINING - CASING = Pvc 12.00m-14.00m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement			16/09/2000	130m	South East
91337	Not Known					01/01/1970	133m	East
WRK100365	Investigation	0.00m-2.80m SILTY SAND CLAY SAND 2.80m-4.40m SANDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = UPVC class 18 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	134m	West
WRK041638	Irrigation					31/12/1970	138m	South East
WRK102942	Investigation	0.00m-2.80m SILTY SND 2.80m-4.40m SAND 4.40m-6.30m SANDY CLAY 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = Pvc 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	140m	West
91546	Stock					31/12/1969	161m	North
91703	Domestic	0.00m-0.50m TOP SOIL 0.50m-1.00m BROWN FINE SAND 1.00m-5.00m TACK YELLOW SAND 5.00m-6.00m GREY SANDY CLAY 6.00m-9.00m GREENY ORANGE CLAY 9.00m-12.50m WHITE AND ORANGE CLAY 12.50m-12.70m FINE TO MED CLEAN SAND 12.70m-16.00m WHITE TO ORANGE CLAY 16.00m-16.50m FINE TO MED SAND 16.50m-18.20m TACKY FINE TO MED SAND 18.20m-21.00m FINE TO MED BROWN SAND 21.00m-26.30m GREENY BROWN DECOMPOSED BASALT 26.30m-26.50m MED COARSE SAND 26.50m-30.55m BASALT	0.00m-26.70m INNER LINING - CASING = Not Known 26.70m-30.55m INNER LINING - SCREEN = Not Known		26.70m-30.55m Basalt	19/09/1983	170m	North West
WRK093080	Investigation	0.00m-3.40m SILTY SAND 3.40m-5.50m SLIGHTLY CLAYEY SAND 5.50m-6.50m SILTY SAND	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = Pvc 0.00m-2.50m OUTER LINING - GRAVEL = Cement 2.50m-3.00m OUTER LINING - GRAVEL = Bentonite 3.00m-6.50m OUTER LINING - GRAVEL = Gravel			16/11/2017	171m	West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK041664	Irrigation	0.00m-10.97m CONCRETE WELL 10.97m-27.13m BASALT 27.13m-30.17m BROWN CLAY AND WOOD 30.17m-0.00m MUDSTONE	0.00m-10.97m INNER LINING - CASING = Not Known 0.00m-15.42m INNER LINING - CASING = Galvanised Iron 10.67m-14.93m INNER LINING - SCREEN = Not Known		10.67m-14.93m	30/08/1976	176m	East
91506	Domestic		0.00m-15.24m INNER LINING - CASING = Galvanised Iron 15.00m-15.24m INNER LINING - SCREEN = Galvanised Iron		15.00m-15.24m	31/12/1963	181m	South East
91505	Domestic, Stock					31/12/1969	187m	South West
WRK070747	Observation	0.00m-0.30m SILT 0.30m-2.50m CLAY 2.50m-12.00m BASALT	0.00m-9.00m INNER LINING - CASING = Pvc 9.00m-12.00m INNER LINING - SCREEN = Pvc 0.00m-7.50m OUTER LINING - GRAVEL = Cement 7.50m-8.00m OUTER LINING - GRAVEL = Bentonite 8.00m-12.00m OUTER LINING - GRAVEL = Gravel		9.00m-12.00m Basalt	06/09/2012	189m	North
91525	Domestic					31/12/1967	194m	South West
91644	Not Known	1.00m-12.00m TOP SOIL 12.00m-15.00m SAND 15.00m-31.00m CLAY 31.00m-40.00m MUDSTONE COAL AND CLAY	0.00m-10.00m INNER LINING - CASING = Not Known 10.00m-40.00m INNER LINING - SCREEN = Not Known		10.00m-40.00m	04/11/1976	196m	East
91685	Domestic, Stock	12.19m-29.87m BASALT 29.87m-30.78m BROWN CLAY	0.00m-13.25m INNER LINING - CASING = Galvanised Iron 13.25m-30.78m INNER LINING - SCREEN = Galvanised Iron		13.25m-30.78m Basalt	12/09/1982	201m	East
91338	Not Known					01/01/1970	208m	East
WRK103599	Investigation	0.00m-2.80m SILTY SAND 2.80m-4.40m SNDY CLAY 4.40m-6.30m SAND 6.30m-6.50m CLAY	0.00m-3.50m INNER LINING - CASING = Pvc 3.50m-6.50m INNER LINING - SCREEN = Pvc 0.00m-2.80m OUTER LINING - GRAVEL = Cement 2.80m-3.30m OUTER LINING - GRAVEL = Bentonite 3.30m-6.50m OUTER LINING - GRAVEL = Gravel			30/05/2017	208m	West
WRK070748	Observation					06/09/2012	216m	North
91489	Stock					31/12/1969	223m	North West
91520	Stock					31/12/1969	236m	North West
91560	Stock					31/12/1967	236m	South West
91616	Domestic, Stock	0.00m-0.30m BLACK LOAMY SOIL 0.30m-1.22m GREY SANDY SOIL 1.22m-3.66m YELLOW CLAY 3.66m-7.01m YELLOW GREY CLAY AND STONES 7.01m-7.62m BROWN DECOMPOSED SANDSTONE 7.62m-25.91m BROWN COFFEE ROCK	0.00m-9.63m INNER LINING - CASING = Not Known 15.24m-25.90m INNER LINING - SCREEN = Not Known		15.24m-25.90m	10/12/1973	240m	East
57265	Stock					01/01/1970	242m	North
91434	Domestic, Stock					31/12/1970	243m	East
91563	Domestic		0.00m-24.38m INNER LINING - CASING = Galvanised Iron 18.29m-24.38m INNER LINING - SCREEN = Galvanised Iron		18.29m-24.38m	31/12/1969	246m	South
91277	Domestic, Stock		0.00m-16.15m INNER LINING - CASING = Galvanised Iron 16.15m-19.81m INNER LINING - SCREEN = Galvanised Iron		16.15m-19.81m Sedimentary	31/12/1964	253m	North East
91343	Irrigation					01/01/1970	255m	East
91542	Stock					31/12/1970	259m	North West
91565	Domestic, Stock					31/12/1967	277m	South
57263	Stock					01/01/1970	306m	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
57481	Not Known	0.00m-32.00m SEE BCL NO 23549 FOR GW4 DETAI	0.00m-32.00m INNER LINING - CASING = Galvanised Iron 0.00m-32.00m INNER LINING - SCREEN = Not Known		0.00m-32.00m	31/01/1984	323m	East
91742	Not Known	29.26m-35.66m BROWN CLAY 35.66m-42.37m BROWN CLAY AND WOOD 42.37m-44.50m BROWN CLAY AND SAND PEBBLES 44.50m-44.81m MUDSTONE	0.00m-44.81m INNER LINING - CASING = Galvanised Iron			30/09/1983	336m	East
91540	Domestic					31/12/1963	349m	North West
WRK041649	Irrigation					31/12/1968	353m	East
WRK041660	Domestic, Industrial, Irrigation, Stock	0.30m-0.76m SANDY LOAM 0.76m-5.18m YELLOW SANDY CLAY 5.18m-7.01m YELLOW CLAY STIFF 7.01m-12.19m SANDSTONE YELLOW 12.19m-14.63m BLUE STONE AND RED SAND STONE 14.63m-19.20m HARD BLUE STONE 19.20m-20.11m YELLOW SAND STONE AND BLUE STONE	0.30m-11.89m INNER LINING - CASING = Not Known			06/03/1973	354m	East
WRK041647	Irrigation		0.00m-26.82m INNER LINING - CASING = Galvanised Iron 26.82m-35.97m INNER LINING - SCREEN = Galvanised Iron		26.82m-35.97m Gravel	31/12/1967	356m	South East
57262	Domestic, Stock					01/01/1970	357m	North
WRK041633	Commercial, Irrigation, Stock		0.00m-1.52m INNER LINING - CASING = Galvanised Iron 1.52m-11.58m INNER LINING - SCREEN = Galvanised Iron 11.58m-13.72m INNER LINING - CASING = Galvanised Iron		1.52m-11.58m Mudstone	31/12/1965	369m	South East
112853	Domestic	0.00m-0.50m TOP SOIL 0.50m-4.50m ORANGE & GREY CLAY 4.50m-7.50m HARD SANDSTONE 7.50m-9.50m ORANGE & GREY CLAY 9.50m-14.00m MUDSTONE 14.00m-15.00m VERY HARD MUDSTONE	-0.30m-11.00m INNER LINING - CASING = Pvc 11.00m-15.00m INNER LINING - SCREEN = Pvc		11.00m-15.00m Mudstone	04/02/1992	378m	South
91333	Domestic					01/01/1970	379m	North East
91539	Domestic					31/12/1970	379m	North West
91567	Domestic					31/12/1970	400m	South
91541	Domestic					31/12/1970	405m	North West
91510	Stock					31/12/1960	409m	West
91564	Domestic					31/12/1970	409m	South
91695	Irrigation	0.00m-0.30m DARK LOAM SOIL 0.30m-1.22m GREY SAND SOIL 1.22m-1.83m BROWN CLAY 1.83m-5.49m GREY BROWN SANDY CLAY 5.49m-7.62m WHITE GREY CLAY 7.62m-14.93m FATTY BROWN SAND 14.93m-23.16m BLACK SEA SLIME 23.16m-43.59m SHELLY PASTY CLAY 43.59m-51.82m BLACK BASALT	0.00m-45.08m INNER LINING - CASING = Galvanised Iron 45.08m-51.82m INNER LINING - SCREEN = Galvanised Iron		45.08m-51.82m Basalt	12/04/1983	417m	East
91630	Domestic, Stock	0.00m-1.83m GREY SOIL 1.83m-3.35m BROWN GREY CLAY 3.35m-4.27m DECOMPOSED BASALT 4.27m-22.86m BASALT	0.00m-6.62m INNER LINING - CASING = Steel 15.24m-22.86m INNER LINING - SCREEN = Steel 0.00m-4.26m OUTER LINING - GRAVEL = Cement		15.24m-22.86m	13/02/1976	419m	East
91760	Domestic, Stock	0.00m-0.30m GREY SOIL 0.30m-3.05m BROWN GREY CLAY 3.05m-10.67m BROWN GREY SANDY CLAY 10.67m-13.72m DARK CEMENTED SEA SLIME 13.72m-17.37m FIRM CORAL SHELLY 17.37m-0.00m DARK MUDSTONE	0.00m-14.48m INNER LINING - CASING = Not Known 13.72m-17.37m INNER LINING - SCREEN = Not Known 12.80m-0.00m OUTER LINING - GRAVEL = Seal		13.72m-17.37m Limestone	14/02/1983	420m	South East
91253	Stock		0.00m-11.58m INNER LINING - CASING = Galvanised Iron 11.58m-13.72m INNER LINING - SCREEN = Galvanised Iron		11.58m-13.72m Mudstone	31/12/1966	430m	South East
91687	Not Known	17.07m-20.73m BASALT 20.73m-21.34m BROWN CLAY 21.34m-21.95m MUDSTONE	0.00m-17.07m INNER LINING - CASING = Galvanised Iron 17.07m-20.73m INNER LINING - SCREEN = Galvanised Iron		17.07m-20.73m	19/12/1980	446m	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK073370	Domestic & Stock	0.00m-0.50m SOIL 0.50m-8.00m CLAY 8.00m-9.00m SANDSTONE 9.00m-13.50m SAND 13.50m-14.00m SANDSTONE 14.00m-19.60m CLAY 19.60m-20.50m SANDSTONE 20.50m-22.50m MUDSTONE	0.50m-19.50m INNER LINING - CASING = Pvc 19.50m-22.50m INNER LINING - SCREEN = Pvc 1.00m-4.00m OUTER LINING - GRAVEL = Cement		19.50m-22.50m Sandstone	08/03/2013	452m	South
57354	Domestic, Stock	0.00m-0.61m GREY SANDY LOAM 0.61m-12.80m YELLOW CLAY 12.80m-19.81m BASALT 19.81m-39.62m BASALT HARD	0.00m-20.73m INNER LINING - CASING = Steel 18.28m-39.62m INNER LINING - SCREEN = Steel		18.28m-39.62m	09/06/1976	453m	North East
91454	Domestic, Stock					31/12/1969	473m	East
WRK979342	Domestic & Stock		0.40m-12.00m INNER LINING - CASING = Pvc 12.00m-24.00m INNER LINING - SCREEN = Pvc 0.50m-5.00m OUTER LINING - GRAVEL = Cement		12.00m-24.00m Mudstone	28/03/2007	480m	South
91433	Stock					31/12/1962	521m	East
57329	Domestic, Stock	0.00m-0.76m BLACK LOAM 0.76m-2.44m YELLOW CLAY 2.44m-5.79m YELLOW AND BLACK CLAY 5.79m-7.01m GRITTY CLAY 7.01m-14.32m SAND STONE YELLOW	0.00m-7.62m INNER LINING - CASING = Not Known 13.71m-14.32m INNER LINING - SCREEN = Not Known		13.71m-14.32m	04/05/1973	523m	North East
WRK982919							525m	South
57268	Domestic, Stock					01/01/1970	530m	North
57273	Domestic, Stock					01/01/1970	530m	North East
91532	Domestic					31/12/1966	553m	South
91429	Stock			Date/time: 1996-06-17 0000 Quality: 47 WLMP: 1.82m DBNS: m RWL: mAHD		31/12/1969	568m	South East
91634	Stock	0.30m-1.22m BLACK SANDY LOAM 1.22m-1.83m BLACK SAND AND COFFEE ROCK 1.83m-8.53m WHITE SAND 8.53m-13.10m BLUE STONE	0.30m-9.14m INNER LINING - CASING = Galvanised Iron 8.53m-13.41m INNER LINING - SCREEN = Galvanised Iron 0.30m-9.14m OUTER LINING - GRAVEL = Cement		8.53m-13.41m	27/02/1976	582m	North West
WRK962342	Domestic & Stock	0.00m-0.40m TOP SOIL 0.40m-1.30m FINE SAND 1.30m-16.70m YELLOW & GRAY CLAY 16.70m-20.00m WEATHERED BASALT	0.40m-16.70m INNER LINING - CASING = Pvc 16.70m-20.00m INNER LINING - SLOT = Pvc 0.00m-3.00m OUTER LINING - GRAVEL = Cement 3.00m-16.70m OUTER LINING - GRAVEL = Gravel		16.70m-20.00m Basalt	22/10/2003	583m	South
91311	Commercial, Domestic, Stock		0.00m-13.72m INNER LINING - CASING = Galvanised Iron 9.14m-13.72m INNER LINING - SCREEN = Galvanised Iron		9.14m-13.72m	31/12/1966	595m	East
57503	Not Known	0.00m-0.90m SURFACE SOIL 0.90m-2.40m SAND 2.40m-4.60m CLAYEY SAND 4.60m-8.20m BROWN & GREY CLAY 8.20m-24.00m SOFT GREEN SANDSTONE 24.00m-69.00m HARD SANDSTONE 69.00m-97.50m BASALT				04/05/1990	610m	West
91470	Stock					31/12/1970	614m	East
57269	Domestic, Irrigation, Stock					01/01/1970	616m	North East
91566	Domestic, Stock					31/12/1970	617m	South

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK102316	Observation	0.00m-1.70m SILTY CLAY 1.70m-2.60m VERY SILTY CLAY 2.60m-5.50m CLAYEY SILT	0.00m-2.50m INNER LINING - CASING = Pvc 2.50m-5.50m INNER LINING - SCREEN = Pvc 0.00m-1.80m OUTER LINING - GRAVEL = Cement 1.80m-2.30m OUTER LINING - GRAVEL = Bentonite 2.30m-5.50m OUTER LINING - GRAVEL = Gravel			15/09/2017	619m	North West
WRK041662	Irrigation	15.24m-16.76m CORAL 16.76m-22.86m BROWN ROCK 22.86m-25.90m MUDSTONE	0.00m-17.37m INNER LINING - CASING = Steel 14.93m-17.37m INNER LINING - SCREEN = Steel 16.76m-25.90m INNER LINING - CASING = Not Known		14.93m-17.37m	01/07/1975	626m	South East
WRK102317	Observation	0.00m-1.70m SILTY CLAY 1.70m-2.60m VERY SILTY CLAY 2.60m-5.50m CLAYEY SILT	0.00m-2.50m INNER LINING - CASING = Pvc 2.50m-5.50m INNER LINING - SCREEN = Pvc 0.00m-1.80m OUTER LINING - GRAVEL = Cement 1.80m-2.30m OUTER LINING - GRAVEL = Bentonite 2.30m-5.50m OUTER LINING - GRAVEL = Gravel			15/09/2017	641m	North West
91316	Stock					31/12/1970	646m	North West
57237	Stock		0.00m-36.58m INNER LINING - CASING = Galvanised Iron 9.75m-36.58m INNER LINING - SCREEN = Galvanised Iron		9.75m-36.58m	31/12/1962	651m	North West
WRK965325							663m	East
91692	Domestic, Stock	0.00m-0.30m GREY SANDY SOIL 0.30m-0.91m BROWN SOIL 0.91m-2.13m BROWN GREY CLAY 2.13m-4.57m GREY BROWN REDDISH CLAY 4.57m-12.80m GREY SANDY CLAY 12.80m-16.76m DECOMPOSED BASALTIC CLAY 16.76m-17.37m BROWN BASALTS 17.37m-43.59m HARD BLACK BASALT 43.59m-49.07m BROWN CLAYEY COAL 49.07m-0.00m MUDSTONE CLAY	0.00m-18.29m INNER LINING - CASING = Galvanised Iron 18.29m-49.07m INNER LINING - SCREEN = Galvanised Iron		18.29m-49.07m	08/03/1983	665m	North East
WRK041661	Agro Industries, Commercial, Domestic	0.00m-0.30m DARK LOAM SOIL 0.30m-0.61m GREY SOIL 0.61m-1.52m BROWN REDDISH CLAY AND ROCK 1.52m-4.27m HARD BROWN SAND CLAY 4.27m-7.92m BROWN WAXY CLAY 7.92m-11.58m BROWN AND GREY CLAY 11.58m-17.07m BROWN COFFEE ROCK 17.07m-31.09m BASALT 31.09m-38.71m BROWN SANDY CLAY AND WOOD QUARTZ PASTY CLAY	0.00m-16.99m INNER LINING - CASING = Not Known 19.81m-31.08m INNER LINING - SCREEN = Not Known		19.81m-31.08m	17/09/1974	671m	East
91697	Domestic, Stock	0.00m-0.30m SANDY LOAM 0.30m-4.57m BROWN CLAY 4.57m-7.92m BRITTLE SANDY BROWN CLAY 7.92m-10.67m SOFT BROWN DECOMPOSED CLAY 10.67m-12.19m BLACK AND BROWN BASALT 12.19m-39.62m BLACK BASALT 39.62m-40.23m GREY CLAY 40.23m-41.75m BROWN COAL AND SAND FINE 41.75m-42.97m GREY BROWN CLAY 42.97m-43.28m DARK MUDSTONE CLAY	0.00m-12.55m INNER LINING - CASING = Galvanised Iron 12.55m-43.28m INNER LINING - SCREEN = Galvanised Iron		12.55m-43.28m	07/09/1983	688m	North East
91430	Domestic					31/12/1970	692m	East
91485	Domestic					31/12/1968	698m	North West
91533	Domestic					31/12/1970	700m	South
WRK041369	Irrigation	0.00m-0.40m TOP SOIL 0.40m-1.00m BLACK CLAY 1.00m-2.00m ORANGE & GREY CLAY 2.00m-11.00m YELLOW & GREY CLAY 11.00m-20.00m VOLCANIC CLAY 20.00m-22.00m WEATHERED BASALT 22.00m-24.00m BROKEN BASALT	-0.50m-20.00m INNER LINING - CASING = Galvanised Iron 20.00m-24.00m INNER LINING - SCREEN = Galvanised Iron			20/12/1996	708m	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
91595	Domestic, Stock	0.00m-0.30m GREY HEAVY SOIL 0.30m-1.28m RUSTY CLAY 1.28m-3.66m FINE SANDY GREY CLAY 3.66m-4.57m LIGHT BLUEY GREY CLAY 4.57m-6.10m RUSTY AND GREY CLAY 6.10m-18.28m BASALT	0.00m-11.27m INNER LINING - CASING = Not Known 6.09m-18.28m INNER LINING - SCREEN = Not Known		6.09m-18.28m	17/03/1972	709m	East
91580	Stock					31/12/1970	714m	North West
91490	Domestic		0.00m-12.80m INNER LINING - CASING = Galvanised Iron 12.80m-14.63m INNER LINING - SCREEN = Galvanised Iron		12.80m-14.63m Sand	31/12/1969	759m	North West
57264	Domestic, Stock					01/01/1970	762m	North West
91524	Domestic					31/12/1970	763m	South
WRK041634	Irrigation					31/12/1968	768m	North East
91455	Domestic, Stock					31/12/1970	770m	East
WRK041644	Irrigation		0.00m-34.14m INNER LINING - CASING = Galvanised Iron 31.09m-34.14m INNER LINING - SCREEN = Galvanised Iron		31.09m-34.14m	31/12/1967	772m	East
57266	Domestic					01/01/1970	773m	North East
WRK104493	Observation	0.00m-0.20m FILL 0.20m-7.50m SANDY CLAY	0.00m-4.00m INNER LINING - CASING = Pvc 4.00m-7.50m INNER LINING - SCREEN = Pvc 0.00m-2.50m OUTER LINING - GRAVEL = Cement 2.50m-3.50m OUTER LINING - GRAVEL = Bentonite 3.50m-7.50m OUTER LINING - GRAVEL = Gravel			23/01/2018	775m	North West
WRK102315	Observation	0.00m-1.70m SILTY CLAY 1.70m-2.60m VERY SILTY CLAY 2.60m-5.50m CLAYEY SILT	0.00m-2.50m INNER LINING - CASING = Pvc 2.50m-5.50m INNER LINING - SCREEN = Pvc 0.00m-1.80m OUTER LINING - GRAVEL = Cement 1.80m-2.30m OUTER LINING - GRAVEL = Bentonite 2.30m-5.50m OUTER LINING - GRAVEL = Gravel			15/09/2017	776m	North West
WRK041659	Irrigation	0.30m-1.22m SANDY LOAM COFFEE ROCK 1.22m-5.18m SANDY CLAY YELLOW 5.18m-9.14m YELLOW AND BLACK CLAY 9.14m-14.32m YELLOW SAND SLOW SOFT 14.32m-20.12m RED SAND STONE POUROUS	0.00m-9.75m INNER LINING - CASING = Galvanised Iron 9.75m-16.15m INNER LINING - SCREEN = Galvanised Iron 9.75m-0.00m OUTER LINING - GRAVEL = Seal		9.75m-16.15m Sandstone	01/06/1973	786m	East
91453	Stock					31/12/1970	787m	East
91601	Domestic, Stock	0.00m-0.30m DARK LOAMY SOIL 0.30m-0.61m COFFEE ROCK 0.61m-5.79m FINE CLAYEY SAND 5.79m-10.97m BROWN SANDY CLAY 10.97m-26.21m BASALT 26.21m-29.87m GREY CLAY 29.87m-30.48m BROWN CLAY AND WOOD 30.48m-31.30m MUDSTONE CLAY	0.00m-13.77m INNER LINING - CASING = Not Known 10.97m-26.21m INNER LINING - SCREEN = Not Known		10.97m-26.21m	20/12/1972	796m	East
57236	Stock		0.00m-12.19m INNER LINING - CASING = Galvanised Iron 10.97m-12.19m INNER LINING - SCREEN = Galvanised Iron		10.97m-12.19m	31/12/1962	800m	North West
91460	Stock					31/12/1970	803m	East
91246	Irrigation, Stock					31/12/1965	805m	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
91596	Domestic, Stock	0.00m-0.30m DARK LOAM 0.30m-0.91m GREY SANDY LOAM 0.91m-1.22m COFFEE ROCK 1.22m-4.57m FINE WHITE SANDY CLAY 4.57m-8.53m RUSTY AND GREY CLAY 8.53m-10.97m RUSTY FINE CONSOLIDATED SAND 10.97m-11.58m RUSTY CLAY 11.58m-14.63m BROWN AND BLACK BASALT 14.63m-25.60m BASALT 25.60m-25.90m MUDSTONE SOFT	0.00m-13.16m INNER LINING - CASING = Not Known 15.24m-25.90m INNER LINING - SCREEN = Not Known		15.24m-25.90m	30/03/1972	809m	East
WRK041425	Domestic, Irrigation, Stock	0.00m-0.25m TOPSOIL 0.25m-11.00m GREY AND ORANGE CLAY 11.00m-12.00m FINE GREY CLAY 12.00m-16.00m SANDY GREY AND ORANGE CLAY 16.00m-16.50m DRIFTY ORANGE SAND 16.50m-17.50m MEDIUM COARSE ORANGE SAND 17.50m-18.50m FINE GREY CLAY				13/11/1982	831m	North East
91562	Stock					31/12/1967	841m	South
WRK041367	Irrigation	0.00m-0.50m BLACK CLAY 0.50m-3.00m DARK GREY CLAY 3.00m-7.00m YELLOW AND GREY CLAY 7.00m-11.00m LIGNIOUS SANDY CLAY 11.00m-14.00m VOLCANIC CLAY 14.00m-15.50m LIMESTONE 15.50m-18.50m BASALT 18.50m-20.50m WEATHERED BASALT 20.50m-23.50m MUDSTONE 23.50m-32.00m BASALT	-0.40m-27.50m INNER LINING - CASING = Abs Plastic 27.50m-32.00m INNER LINING - SCREEN = Abs Plastic			18/03/1996	850m	East
91741	Not Known	0.00m-0.61m SAND GREY LOAM SOIL 0.61m-4.57m YELLOW AND BROWN GREY CLAY 4.57m-8.23m GREY DECOMPOSED CLAY 8.23m-10.67m HARD BROWN BASALT 10.67m-31.09m BLACK BASALT 31.09m-32.00m BROWN CLAY	0.00m-11.44m INNER LINING - CASING = Galvanised Iron 11.44m-32.00m INNER LINING - SCREEN = Galvanised Iron		11.44m-32.00m Basalt	26/01/1984	855m	East
WRK041399			-0.20m-24.00m INNER LINING - CASING = Pvc -0.20m-60.00m INNER LINING - CASING = Pvc 40.00m-55.00m INNER LINING - SCREEN = Pvc				864m	South
WRK041427	Domestic, Irrigation, Stock	0.00m-0.65m SANDY TOPSOIL 0.65m-3.00m ORANGE CLAY 3.00m-8.00m YELLOW AND ORANGE CLAY 8.00m-13.00m VOLCANIC CLAY 13.00m-15.00m SANDSTONE	0.00m-13.00m INNER LINING - CASING = Pvc 13.00m-15.00m INNER LINING - SCREEN = Pvc		13.00m-15.00m Sandstone	15/02/1983	871m	North East
57238	Stock		0.00m-9.75m INNER LINING - CASING = Galvanised Iron 9.75m-15.85m INNER LINING - SCREEN = Galvanised Iron		9.75m-15.85m Sand	31/12/1967	916m	North West
91075	Observation, State Observation Network		0.00m-25.50m INNER LINING - CASING = Not Known 25.50m-29.00m INNER LINING - SCREEN = Not Known	Date/time: 2009-05-07 0840 Quality: 43 WLMP: 13.92m DBNS: 13.01m RWL: 19.24mAHD	25.50m-29.00m Basalt	09/05/1980	933m	East
WRK041671	Irrigation	0.00m-0.30m GREY SANDY SOIL 0.30m-3.35m YELLOW GREY CLAY 3.35m-6.70m GREY BROWN CLAY 6.70m-14.93m DECOMPOSED BROWN CLAY 14.93m-17.07m BROWN BASALT 17.07m-29.26m BLACK BASALT 29.26m-38.71m VERY HARD BLACK BASALT 38.71m-39.62m BLACK COAL AND WOOD	0.00m-17.79m INNER LINING - CASING = Galvanised Iron 17.79m-39.62m INNER LINING - SCREEN = Galvanised Iron		17.79m-39.62m Basalt	26/01/1985	951m	East
57275	Stock					01/01/1970	953m	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK100604	Investigation	0.00m-0.80m SILTY SAND 0.80m-5.50m SILTY SAND	0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-5.30m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-5.50m OUTER LINING - GRAVEL = Gravel			08/06/2017	961m	North West
91329	Domestic, Stock					01/01/1970	976m	South East
WRK041417	Not Known	0.30m-0.61m SANDY LOAM BLACK 0.61m-2.44m YELLOW CLAY STIFF 2.44m-5.18m BLUE CLAY 5.18m-10.06m YELLOW SANDY CLAY 10.06m-10.36m STREAKS BLUE CLAY WHITE SANDY CLAY 10.36m-10.67m WHITE CLAY GRITTY 10.67m-13.11m WHITE SAND SUGAR 13.11m-14.32m PIPE CLAY AND SAND 14.32m-16.46m WHITE SAND WITHOUT CLAY 16.46m-17.37m COAL SLAG 17.37m-20.42m COAL AND WOOD 20.42m-21.94m WHITE CLAY AND WOOD 21.94m-23.16m SAND COAL AND WOOD 23.16m-26.51m WHITE MUDDY STONE	0.00m-12.19m INNER LINING - CASING = Not Known 12.19m-13.10m INNER LINING - SCREEN = Not Known		12.19m-13.10m	07/02/1976	978m	North West
91527	Stock					31/12/1970	981m	South
WRK100602	Investigation	0.00m-0.80m SILTY SAND 0.80m-5.50m SILTY SAND	2.00m-5.30m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-5.50m OUTER LINING - GRAVEL = Gravel			08/06/2017	1001 m	North West
WRK100603	Investigation	0.00m-0.80m SILTY SAND 0.80m-6.50m SILTY SAND	2.00m-5.30m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-6.50m OUTER LINING - GRAVEL = Gravel			08/06/2017	1008 m	North West
WRK041672	Commercial, Irrigation, Stock	0.00m-0.30m DARK SANDY SOIL 0.30m-1.22m GREY FATTY SAND 1.22m-2.44m YELLOW BROWN CLAY 2.44m-5.79m FATTY FINE CONSOLIDATED SAND 5.79m-7.92m DECOMPOSED BROWN CLAY 7.92m-11.89m FIRM BROWN BASALT 11.89m-33.22m BLACK BASALT 33.22m-33.53m BROWN CLAY 33.53m-34.75m GREY CLAY	0.00m-10.05m INNER LINING - CASING = Galvanised Iron 10.05m-34.75m INNER LINING - SCREEN = Galvanised Iron		10.05m-34.75m Basalt	11/11/1983	1014 m	East
91439	Stock					31/12/1970	1018 m	East
91589	Irrigation	0.30m-1.83m SANDY LOAM 1.83m-12.50m SAND CLAY 12.50m-18.29m SANDSTONE AND SEA SHELL 18.29m-19.20m BLUE STONE 19.20m-21.00m BROWN COAL AND QUARTZ	0.00m-12.80m INNER LINING - CASING = Not Known 12.80m-14.32m INNER LINING - SCREEN = Not Known		12.80m-14.32m	26/01/1971	1018 m	East
91519	Domestic					31/12/1962	1040 m	South
WRK041364	Irrigation	0.00m-0.10m TOP SOIL 0.10m-5.00m CLAY 5.00m-15.50m SANDY CLAY 15.50m-16.00m SAND 16.00m-17.00m CLAY - GREY	0.30m-14.00m INNER LINING - CASING = Pvc 14.00m-17.00m INNER LINING - SCREEN = Pvc 0.00m-2.00m OUTER LINING - GRAVEL = Cement 2.00m-2.50m OUTER LINING - GRAVEL = Bentonite			03/08/1994	1051 m	North West
91479	Stock					31/12/1970	1058 m	East
WRK058402	Observation					20/06/2011	1072 m	North East
WRK041651	Irrigation					31/12/1969	1077 m	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK041413	Irrigation	0.00m-0.30m SURFACE SOIL 0.30m-0.61m SAND 0.61m-3.05m CLAY 3.05m-6.71m MOTTLEY CLAY 6.71m-9.14m DECOMPOSED BASALTIC CLAY 9.14m-10.97m GREY CLAY 10.97m-12.80m BROWN SANDY CLAY 12.80m-14.94m MEDIUM COARSE SAND WITH BAND OF BROWN CLAY 14.94m-15.24m BROWN STICKY CLAY	0.00m-14.94m INNER LINING - CASING = Not Known 11.89m-14.94m INNER LINING - SCREEN = Not Known		11.89m-14.94m	18/11/1971	1082 m	North West
91528	Stock					31/12/1970	1091 m	South
91730	Domestic	0.00m-0.60m SURFACE SOIL 0.60m-0.90m IRONSTONE 0.90m-7.60m SANDY BROWN CLAY 7.60m-12.50m SOFT BROWN SANDSTONE WITH LAYERS OF CLAY 12.50m-27.40m GREEN AND BROWN SANDSTONE 27.40m-31.10m GREY SANDSTONE	0.00m-14.00m INNER LINING - CASING = Pvc 14.00m-31.10m INNER LINING - SCREEN = Pvc		14.00m-31.10m Sandstone	02/04/1985	1096 m	South
91598	Domestic, Stock	0.00m-0.30m BLACK SOIL 0.30m-11.58m BROWN RUSTY CLAY 11.58m-14.32m SHELLY CLAY 14.32m-17.37m HARD SHELLY LIMESTONE AND CORAL 17.37m-23.47m BASALT 23.47m-25.91m BLACK AND BROWN CLAY 25.91m-26.51m MUDSTONE CLAY	0.00m-19.89m INNER LINING - CASING = Not Known 15.24m-19.81m INNER LINING - SCREEN = Not Known		15.24m-19.81m	31/08/1972	1141 m	East
91318	Domestic					31/12/1970	1157 m	East
91468	Domestic, Stock					31/12/1961	1179 m	East
91464	Domestic, Stock					31/12/1970	1193 m	East
WRK041652	Domestic, Irrigation, Stock					01/01/1970	1195 m	East
91710	Not Known	0.00m-0.50m SANDY TOP SOIL 0.50m-4.00m HARD RED CLAY 4.00m-6.00m WHITE SANDY CLAY 6.00m-8.00m IRONSTONE CLAY 8.00m-11.50m GREY CLAY 11.50m-16.00m HARD WEATHERED ROCK				16/01/1984	1197 m	South West
91509	Domestic					31/12/1968	1198 m	North West
91624	Domestic, Stock	0.30m-1.52m SAND 1.52m-6.70m CLAY 6.70m-9.75m WHITE SAND 9.75m-14.02m GREEN SILT 14.02m-14.83m LIMESTONE AND SHALE 14.83m-16.76m MUDSTONE	0.00m-1.52m INNER LINING - CASING = Not Known 0.00m-14.93m INNER LINING - CASING = Pvc 6.70m-14.63m INNER LINING - SCREEN = Pvc 0.00m-14.93m OUTER LINING - GRAVEL = Gravel		6.70m-14.63m	02/11/1974	1199 m	East
57317	Domestic, Stock	0.30m-1.83m SANDY FOAM 1.83m-1.89m COFFEE ROCKS 1.89m-6.10m SANDY CLAY 6.10m-6.71m STIFF YELLOW CLAY 6.71m-8.84m SAND YELLOW MEDIUM GRADE 8.84m-9.49m STIFF WHITE CLAY 9.49m-11.58m WHITE SAND MEDIUM TO COURSE 11.58m-13.00m CLAY WITH PIPE CLAY	0.00m-6.40m INNER LINING - CASING = Not Known 5.79m-13.11m INNER LINING - SCREEN = Not Known		5.79m-13.11m Sand	14/12/1970	1203 m	North West
91593	Domestic, Stock	0.30m-2.13m BLACK SANDY LOAM 2.13m-4.27m FINE SAND (WHITE) 4.27m-9.14m SANDY CLAY (RED) 9.14m-10.97m STIFF BLUE CLAY 10.97m-14.63m SEA SLIME AND SEA SHELL 14.63m-16.46m HARD WHITE CORAL AND SHELL 16.46m-17.68m HARD CORAL (INTERMITTENT)	0.30m-16.61m INNER LINING - CASING = Not Known			17/09/1971	1206 m	East
132775	Domestic, Stock	0.00m-0.40m SANDY TOPSOIL 0.40m-1.00m GREY CLAY 1.00m-10.00m YELLOW & GREY CLAY 10.00m-14.70m VOLCANIC CLAY 14.70m-15.20m BASALT 15.20m-18.00m LIMESTONE HARD 18.00m-23.00m BASALT 23.00m-50.00m MUDSTONE	-0.40m-15.00m INNER LINING - CASING = Pvc 15.00m-39.00m INNER LINING - SCREEN = Pvc		15.00m-39.00m Basalt	26/03/1997	1214 m	East
WRK058401	Observation					20/06/2011	1229 m	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
91686	Irrigation	0.00m-0.35m TOP SOIL 0.35m-2.00m MOTTLED CLAY 2.00m-13.60m MUDSTONE				08/09/1982	1239 m	South West
119488	Domestic, Irrigation	0.00m-1.50m TOP SOIL 1.50m-27.40m MOTTLED CLAY 27.40m-40.00m WEATHERED BASALT 40.00m-55.00m BASALT FRACTURES & QUARTZ	-0.10m-40.00m INNER LINING - CASING = Steel 40.00m-55.00m INNER LINING - SCREEN = Steel 0.00m-40.00m OUTER LINING - GRAVEL = Cement 40.00m-49.00m OUTER LINING - GRAVEL = Cement			09/03/1992	1244 m	South
57241	Irrigation					01/01/1970	1274 m	North West
91673	Not Known	0.00m-4.50m MOTTLED CLAY 4.50m-8.00m WHITE CLAY 8.00m-11.00m RED AND WHITE CLAY 11.00m-12.50m MUDSTONE	0.00m-11.00m INNER LINING - CASING = Not Known 11.00m-12.50m INNER LINING - SCREEN = Not Known		11.00m-12.50m	19/10/1981	1275 m	South West
305262	Non Groundwater					31/12/1953	1277 m	North West
305263	Non Groundwater					31/12/1953	1277 m	North West
305264	Non Groundwater					31/12/1953	1277 m	North West
305265	Non Groundwater					31/12/1953	1277 m	North West
305266	Non Groundwater					31/12/1953	1277 m	North West
305267	Non Groundwater					31/12/1953	1277 m	North West
305268	Non Groundwater					31/12/1953	1277 m	North West
305269	Non Groundwater					31/12/1953	1277 m	North West
305270	Non Groundwater					31/12/1953	1277 m	North West
305271	Non Groundwater					31/12/1953	1277 m	North West
305272	Non Groundwater					31/12/1953	1277 m	North West
305273	Non Groundwater					31/12/1953	1277 m	North West
305274	Non Groundwater					31/12/1964	1277 m	North West
305275	Non Groundwater					31/12/1964	1277 m	North West
305276	Non Groundwater					31/12/1964	1277 m	North West
305277	Non Groundwater					31/12/1964	1277 m	North West
305278	Non Groundwater					31/12/1964	1277 m	North West
305279	Non Groundwater					31/12/1964	1277 m	North West
305280	Non Groundwater					31/12/1964	1277 m	North West
305281	Non Groundwater					31/12/1964	1277 m	North West
305282	Non Groundwater					31/12/1964	1277 m	North West
305283	Non Groundwater					31/12/1964	1277 m	North West
305284	Non Groundwater					31/12/1964	1277 m	North West
305285	Non Groundwater					31/12/1964	1277 m	North West
305286	Non Groundwater					31/12/1964	1277 m	North West
305287	Non Groundwater					31/12/1964	1277 m	North West
305288	Non Groundwater					31/12/1964	1277 m	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
305289	Non Groundwater					31/12/1964	1277 m	North West
305290	Non Groundwater					31/12/1964	1277 m	North West
305291	Non Groundwater					31/12/1964	1277 m	North West
305292	Non Groundwater					31/12/1964	1277 m	North West
305293	Non Groundwater					31/12/1964	1277 m	North West
305294	Non Groundwater					31/12/1964	1277 m	North West
305295	Non Groundwater					31/12/1964	1277 m	North West
305296	Non Groundwater					31/12/1964	1277 m	North West
305297	Non Groundwater					31/12/1964	1277 m	North West
305298	Non Groundwater					31/12/1964	1277 m	North West
305299	Non Groundwater					31/12/1964	1277 m	North West
305300	Non Groundwater					31/12/1964	1277 m	North West
305301	Non Groundwater					31/12/1964	1277 m	North West
305302	Non Groundwater					31/12/1964	1277 m	North West
305303	Non Groundwater					31/12/1964	1277 m	North West
305304	Non Groundwater					31/12/1964	1277 m	North West
305305	Non Groundwater					31/12/1964	1277 m	North West
305306	Non Groundwater					31/12/1964	1277 m	North West
305307	Non Groundwater					31/12/1964	1277 m	North West
305308	Non Groundwater					31/12/1964	1277 m	North West
305309	Non Groundwater					31/12/1964	1277 m	North West
305310	Non Groundwater					31/12/1964	1277 m	North West
305311	Non Groundwater					31/12/1964	1277 m	North West
305312	Non Groundwater					31/12/1971	1277 m	North West
57299	Stock					01/01/1970	1326 m	North
57300	Stock					01/01/1970	1331 m	North
91488	Stock					31/12/1970	1345 m	South
WRK041646	Domestic, Industrial					31/12/1970	1351 m	East
91627	Domestic	0.00m-0.30m SURFACE SOIL 0.30m-0.61m SAND 0.61m-2.74m SANDY CLAY 2.74m-9.14m FINE SANDY CLAY 9.14m-11.58m MARINE SILT AND SHELL 11.58m-14.32m LIMESTONE	0.00m-13.11m INNER LINING - CASING = Not Known 13.11m-14.32m INNER LINING - SCREEN = Not Known		13.11m-14.32m	28/01/1975	1371 m	East
91469	Domestic, Stock					31/12/1970	1384 m	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
141203	Irrigation	0.00m-1.00m TOP SOIL 1.00m-7.00m CLAY 7.00m-18.00m SAND 18.00m-75.00m BASALT	0.00m-18.00m INNER LINING - CASING = Steel 0.00m-69.00m INNER LINING - CASING = Steel 45.00m-69.00m INNER LINING - SCREEN = Steel 69.00m-75.00m INNER LINING - SCREEN = Slotted Steel 0.00m-5.00m OUTER LINING - GRAVEL = Bentonite		45.00m-69.00m Basalt	21/02/2000	1403 m	South
91458	Stock					31/12/1968	1404 m	East
WRK058405	Observation					20/06/2011	1420 m	North
91617	Domestic, Stock	0.00m-0.46m TOPSOIL RED LOAM 0.46m-9.14m WHITE SANDY CLAY 9.14m-10.97m SANDY CLAY RED AND FATTY SAND 10.97m-13.11m STIFF GREY CLAY 13.11m-24.69m GREY STONE	0.00m-13.41m INNER LINING - CASING = Not Known 17.37m-19.50m INNER LINING - SCREEN = Not Known		17.37m-19.50m	22/09/1972	1437 m	South West
57231	Irrigation					31/12/1970	1450 m	North East
WRK041429	Irrigation	0.00m-1.00m SANDY TOP SOIL 1.00m-18.20m FINE CLAY BRWON SAND 18.20m-24.30m BROWN CALY BOLIND SAND 24.30m-39.60m GREY MEDIUM HARD MUDSTONE 39.60m-54.80m GREY/BLUE HARD MUDSTONE 54.80m-60.00m HARD SANDSTONE WITH LAYERS OF QUARTZ 60.00m-85.00m HARD BLUE SANDSTONE WITH SOME FRACTURES 85.00m-98.00m MEDIUM HARD BLUE SANDSTONE	0.00m-34.00m INNER LINING - CASING = Mild Steel 34.00m-98.00m INNER LINING - SCREEN = Mild Steel		34.00m-98.00m	03/06/1985	1452 m	North West
57304	Domestic, Stock					01/01/1970	1466 m	North
57370	Domestic, Stock	27.43m-41.15m BASALT 41.15m-41.45m BROWN CLAY 41.45m-43.89m BROWN GREY SANDY CLAY 43.89m-44.19m MUDSTONE CLAY	0.00m-27.43m INNER LINING - CASING = Not Known 27.43m-41.14m INNER LINING - SCREEN = Not Known		27.43m-41.14m	04/05/1977	1467 m	North East
WRK058403	Observation					20/06/2011	1469 m	North
91647	Domestic, Stock	0.30m-0.61m GREY LOAM 0.61m-2.44m YELLOW CLAY 2.44m-4.27m GREY CLAY 4.27m-5.49m YELLOW AND GREY SAND CLAY 5.49m-9.14m FINE WHITE SAND 9.14m-11.58m SEA SLIME 11.58m-13.10m BLUE STONE AND MIXTURE OF CORAL AND CLAY STICKS	0.00m-11.58m INNER LINING - CASING = Not Known 0.30m-13.10m INNER LINING - SCREEN = Not Known		0.30m-13.10m	22/09/1977	1483 m	East
140062	Domestic, Stock	0.00m-1.00m TOP SOIL 1.00m-8.00m CLAY 8.00m-15.00m MUDSTONE 15.00m-25.00m BASALT 25.00m-38.00m SAND 38.00m-40.00m CLAY	0.00m-40.00m INNER LINING - CASING = Pvc Class 12 15.00m-38.00m INNER LINING - SCREEN = Pvc Class 12 0.00m-8.00m OUTER LINING - GRAVEL = Bentonite 8.00m-40.00m OUTER LINING - GRAVEL = Gravel			27/01/1999	1491 m	North
57501	Stock					01/01/1988	1500 m	North West
91699	Domestic, Stock	0.00m-0.23m DARK SOIL 0.23m-0.61m GREY FATTY SANDY SOIL 0.61m-2.44m GREY BROWN CLAY 2.44m-8.84m FATTY CONSOLIDATED SAND AND CLAY 8.84m-10.67m SEA SLIME 10.67m-12.50m DARK MARL 12.50m-14.32m BROWN MARL AND SHELL 14.32m-21.03m SHELLY CORAL 21.03m-22.86m BASALT	0.00m-14.94m INNER LINING - CASING = Galvanised Iron 14.94m-22.86m INNER LINING - SCREEN = Galvanised Iron		14.94m-22.86m Basalt	16/08/1983	1506 m	East
91403	Stock					31/12/1963	1520 m	South East
91456	Stock					31/12/1970	1523 m	East
WRK972332							1539 m	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
91474	Stock					31/12/1970	1546 m	East
57325	Domestic, Stock	0.00m-21.30m DEEPENING EXISTING BORE (PERMIT NO. 3087) 21.30m-27.70m BASALT 27.70m-31.40m SAND	0.00m-6.09m INNER LINING - CASING = Galvanised Iron 0.00m-31.40m INNER LINING - SCREEN = Not Known		0.00m-31.40m	06/04/1977	1549 m	North
WRK057599	Observation	0.00m-0.50m soil fill 0.50m-5.00m weathered siltstone	0.00m-2.00m INNER LINING - CASING = Pvc 2.00m-5.00m INNER LINING - SCREEN = Pvc 0.00m-2.20m OUTER LINING - GRAVEL = Cement 2.20m-2.80m OUTER LINING - GRAVEL = Bentonite 2.80m-5.00m OUTER LINING - GRAVEL = Gravel		0.00m-2.00m Siltstone 2.00m-5.00m Siltstone	02/07/2010	1554 m	North
WRK057839	Observation					29/03/2011	1565 m	North East
WRK057841	Observation					29/03/2011	1566 m	North East
91745	Domestic, Stock	30.00m-60.00m SANDSTONE				31/12/1986	1569 m	East
WRK057836	Observation	0.00m-4.00m Clay 4.00m-8.00m Silty clay 8.00m-10.00m Silty stiff clay 10.00m-16.00m Clay	0.00m-10.00m INNER LINING - CASING = Pvc 10.00m-16.00m INNER LINING - SCREEN = Pvc 0.00m-8.50m OUTER LINING - GRAVEL = Cement		0.00m-10.00m Clay 10.00m-16.00m Clay	21/07/2010	1580 m	North East
WRK057838	Observation					29/03/2011	1580 m	North East
WRK057842	Observation					29/03/2011	1584 m	North East
WRK057840	Observation					29/03/2011	1585 m	North East
91463	Stock					31/12/1970	1587 m	South East
57410	Domestic, Stock	21.34m-42.98m BASALT 42.98m-0.00m BORE DEEPENED ONLY	0.00m-22.05m INNER LINING - CASING = Galvanised Iron 22.05m-42.98m INNER LINING - SCREEN = Galvanised Iron		22.05m-42.98m Basalt	20/12/1981	1588 m	North East
WRK992269							1589 m	North West
57412	Domestic, Stock	0.00m-0.20m TOP SOIL 0.20m-1.50m GREY CLAY 1.50m-6.00m VOLCANIC CLAY 6.00m-10.00m WEATHERED BASALT 10.00m-13.15m BASALT	0.00m-11.00m INNER LINING - CASING = Pvc 11.00m-13.15m INNER LINING - SCREEN = Pvc		11.00m-13.15m Basalt	02/02/1982	1590 m	North
WRK057843	Observation					29/03/2011	1591 m	North East
91499	Stock					31/12/1961	1595 m	South
140030	Domestic, Stock	0.00m-3.00m ORANGE CLAY 3.00m-19.00m VOLCANIC CLAY 19.00m-19.50m BASALT 19.50m-24.00m MUDSTONE - HARD 24.00m-39.00m HARD BASALT	-0.40m-19.50m INNER LINING - CASING = Not Known 19.50m-39.00m INNER LINING - SCREEN = Not Known			31/12/1998	1606 m	East
57453	Domestic, Irrigation, Stock	0.00m-0.30m BROWN SOIL 0.30m-0.61m GREY SOIL 0.61m-2.44m YELLOW AND REDDISH CLAY 2.44m-6.70m GREY DECOMPOSED CLAY 6.70m-19.20m BROWN DECOMPOSED CLAY 19.20m-20.12m BROWN AND BLACK BASALT 20.12m-41.76m HARD BLACK BASALT	0.00m-20.50m INNER LINING - CASING = Galvanised Iron 20.50m-41.76m INNER LINING - SCREEN = Galvanised Iron		20.50m-41.76m Basalt	03/07/1984	1615 m	North East
WRK058404	Observation					01/06/2011	1623 m	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
57318	Domestic, Stock	0.00m-0.30m DARK LOAM SOIL 0.30m-1.83m RUSTY CLAY 1.83m-2.44m BROWN AND REDDISH CLAY 2.44m-6.10m HARD BROWN SANDY CLAY 6.10m-9.14m REDDISH CLAY 9.14m-12.19m GREY AND WHITE CLAY 12.19m-14.63m BROWN CLAY 14.63m-17.98m FINE GRAINED BROWN CLAY 17.98m-18.29m SAND STONES 18.29m-18.59m GREY CLAY (SIMILAR TO MUDSTONE) 18.59m-21.34m BROWN SOFT BASALT 21.34m-45.11m HARD BASALT 45.11m-45.72m BROWN CLAY 45.72m-48.46m BROWN GREY CLAY 48.46m-48.77m MUDSTONE	0.00m-48.77m INNER LINING - CASESCRN = Not Known		0.00m-48.77m	14/12/1971	1625 m	North East
57184	Not Known					23/10/1987	1628 m	North West
57225	Domestic, Stock		0.00m-16.76m INNER LINING - CASING = Galvanised Iron 38.10m-38.71m INNER LINING - SCREEN = Galvanised Iron		38.10m-38.71m	31/12/1968	1629 m	North East
91682	Domestic	0.00m-0.15m DARK SANDY LOAM 0.15m-0.61m GREY SAND LOAM 0.61m-3.35m YELLOW GREY CLAY 3.35m-5.79m GREY SANDY CLAY 5.79m-8.23m BROWN GREY CLAY 8.23m-10.36m GREY SANDY CLAY 10.36m-12.19m BROWN FATTY FINE SAND	0.00m-11.12m INNER LINING - CASING = Galvanised Iron 11.12m-12.19m INNER LINING - SCREEN = Galvanised Iron 0.00m-12.19m OUTER LINING - GRAVEL = Gravel 10.06m-0.00m OUTER LINING - GRAVEL = Seal		11.12m-12.19m Sand	13/08/1982	1647 m	South West
91493	Stock					31/12/1968	1649 m	South West
126447	Domestic, Stock	12.10m-24.30m BASALT			12.10m-24.30m Basalt	02/12/1992	1667 m	East
126975	Groundwater Investigation, Observation, State Observation Network	0.00m-0.45m TOP SOIL 0.45m-0.60m COFFEE ROCK 0.60m-7.00m RED ORANGE & GREY SANDY CLAY 7.00m-25.50m VOLCANIC CLAY 25.50m-32.00m WEATHERED BASALT 32.00m-34.00m HARD FRESH BASALT 34.00m-35.00m DECOMPOSED BASALT 35.00m-38.50m BROWN COAL & WOOD 49.00m-49.00m HONEYCOMB BASALT & LAYERS OF BASALT	-0.40m-41.00m INNER LINING - CASING = Abs Plastic 41.00m-49.00m INNER LINING - SCREEN = Abs Plastic	Date/time: 2020-11-05 1257 Quality: 43 WLMP: 15.42m DBNS: m RWL: mAHD	41.00m-49.00m Basalt	10/01/1996	1670 m	North East
57351	Domestic, Stock	0.00m-0.30m CLAYEY SOIL 0.30m-1.22m YELLOW CLAY 1.22m-2.44m REDDISH CLAY 2.44m-14.02m DECOMPOSED CLAY 14.02m-32.00m BASALT	0.00m-14.70m INNER LINING - CASING = Steel 19.50m-32.00m INNER LINING - SCREEN = Steel 0.00m-1.83m OUTER LINING - GRAVEL = Cement		19.50m-32.00m	02/02/1976	1675 m	North East
57301	Stock					01/01/1970	1678 m	North
57183	Groundwater Investigation		0.00m-26.00m INNER LINING - CASING = Galvanised Iron 45.00m-60.00m INNER LINING - SCREEN = Galvanised Iron		45.00m-60.00m	16/10/1987	1679 m	North West
57366	Stock	0.00m-0.91m TOP SOIL SANDY LOAM 0.91m-5.18m YELLOW CLAY SANDY 5.18m-9.14m SAND STONE YELLOW 9.14m-16.76m BLUE STONE AND SOFT BASALT 16.76m-30.80m HARD BLACK BASALT 30.80m-31.40m RED BASALT	0.00m-5.48m INNER LINING - CASING = Mild Steel 0.00m-31.40m INNER LINING - SCREEN = Not Known		0.00m-31.40m	20/04/1977	1684 m	North
57303	Domestic, Stock					01/01/1970	1688 m	North
WRK965007	Irrigation						1696 m	East
91317	Stock					31/12/1970	1702 m	South East
57333	Domestic, Stock	0.00m-0.61m BROWN CLAY SOIL 0.61m-1.22m YELLOW CLAY 1.22m-2.44m BROWN CLAY 2.44m-3.66m DECOMPOSED BASALT 3.66m-22.25m BROWN BASALT 22.25m-24.68m BROWN SAND WOOD AND LIGNITE	0.00m-4.71m INNER LINING - CASING = Not Known 19.20m-24.68m INNER LINING - CASING = Not Known 20.72m-24.68m INNER LINING - SCREEN = Not Known		20.72m-24.68m	11/05/1974	1703 m	North
WRK041655	Domestic, Irrigation, Stock					31/12/1969	1703 m	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
57347	Domestic, Stock	0.00m-0.30m BROWN CLAYEY SOIL 0.30m-4.57m GREY AND BROWN CLAY 4.57m-8.23m DECOMPOSED BASALT 8.23m-27.13m BASALT 27.13m-31.70m BROWN CLAY 31.70m-32.00m MULLOCKY SAND 32.00m-33.53m BROWN CLAY 33.53m-34.13m BROWN MUDSTONE CLAY	0.00m-9.52m INNER LINING - CASING = Steel 8.83m-27.12m INNER LINING - SCREEN = Steel 0.00m-5.49m OUTER LINING - GRAVEL = Cement		8.83m-27.12m	07/09/1975	1707 m	North
91462	Stock					31/12/1970	1707 m	East
57365	Domestic	0.30m-0.76m BLACK LOAM 0.76m-3.35m BLACK AND YELLOW CLAY 3.35m-7.01m YELLOW CLAY 7.01m-12.19m RED SAND STONE 12.19m-14.63m ALLUVIAL SAND STONE	0.30m-14.63m INNER LINING - CASING = Not Known			17/05/1973	1727 m	North
57499	Domestic, Stock	0.00m-0.30m TOPSOIL 0.30m-1.00m BLACK CLAY 1.00m-6.00m VOLCANIC CLAY 6.00m-17.00m WEATHERED BASALT 17.00m-19.20m BASALT	0.00m-7.00m INNER LINING - CASING = Pvc 17.00m-19.20m INNER LINING - SCREEN = Pvc		17.00m-19.20m	30/12/1988	1727 m	North
57305	Domestic					01/01/1970	1730 m	North
57306	Domestic, Stock					01/01/1970	1733 m	North
57411	Domestic, Stock	22.86m-41.76m BASALT	0.00m-21.03m INNER LINING - CASING = Galvanised Iron 21.03m-42.98m INNER LINING - SCREEN = Galvanised Iron		21.03m-42.98m Basalt	17/12/1981	1734 m	North
57383	Domestic, Stock	0.00m-0.30m TOP SOIL 0.30m-5.50m CLAY 5.50m-11.00m IRONSTONE 11.00m-16.60m IRONSTONE AND BASALT	0.00m-13.60m INNER LINING - CASING = Pvc 13.60m-16.60m INNER LINING - SCREEN = Pvc		13.60m-16.60m Basalt	21/11/1978	1735 m	North
WRK041406	Domestic, Irrigation, Stock		0.00m-8.83m INNER LINING - CASING = Mild Steel 25.90m-32.31m INNER LINING - SCREEN = Mild Steel		25.90m-32.31m	31/12/1969	1736 m	North
57359	Stock	0.30m-0.61m PETE BLACK 0.61m-3.05m YELLOW CLAY 3.05m-6.10m YELLOW AND BLACK CLAY 6.10m-15.24m RED SAND STONE 15.24m-18.28m BLUE STONE	0.30m-6.10m INNER LINING - CASING = Galvanised Iron			15/01/1976	1737 m	North
91300	Irrigation					31/12/1960	1738 m	South East
57267	Stock					01/01/1970	1739 m	North East
WRK981119	Domestic & Stock	0.00m-2.50m CLAYEY SAND 2.50m-4.00m SAND	0.00m-1.00m INNER LINING - CASING = Pvc 1.00m-4.00m INNER LINING - SCREEN = Pvc 0.00m-0.30m OUTER LINING - GRAVEL = Cement 0.30m-0.70m OUTER LINING - GRAVEL = Bentonite 0.70m-4.00m OUTER LINING - GRAVEL = Gravel			22/05/2007	1745 m	North West
91461	Stock					31/12/1966	1747 m	South East
57360	Stock	0.30m-0.61m BLACK PETE 0.61m-5.18m YELLOW CLAY 5.18m-12.19m RED SAND STONE HARD 12.19m-18.20m BLUE STONE	0.30m-6.10m INNER LINING - CASING = Galvanised Iron 15.24m-18.28m INNER LINING - SCREEN = Galvanised Iron		15.24m-18.28m	20/03/1976	1748 m	North
57401	Domestic, Stock	0.00m-0.50m TOP SOIL 0.50m-5.00m GREY CLAY 5.00m-18.35m BASALT	0.00m-16.00m INNER LINING - CASING = Pvc 16.00m-18.35m INNER LINING - SCREEN = Pvc		16.00m-18.35m Basalt	17/03/1981	1770 m	North
91428	Stock					31/12/1970	1784 m	East
57429	Domestic, Stock	0.00m-0.15m TOP SOIL 0.15m-6.00m LIGHT BROWN CLAY 6.00m-15.75m BASALT	0.00m-13.75m INNER LINING - CASING = Pvc 13.75m-15.75m INNER LINING - SCREEN = Pvc		13.75m-15.75m Basalt	26/07/1983	1785 m	North
57378	Domestic, Stock	0.00m-0.60m TOP SOIL 0.60m-1.50m GREY CLAY 1.50m-2.70m YELLOW CLAY 2.70m-17.90m BROWN CLAY 17.90m-19.50m DECOMPOSED BASALT AND BOULDERS 19.50m-37.20m BASALT	0.00m-20.40m INNER LINING - CASING = Pvc 20.10m-37.20m INNER LINING - SCREEN = Pvc		20.10m-37.20m	07/04/1977	1793 m	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
57467	Domestic	0.00m-0.30m TOPSOIL 0.30m-2.50m GREY CLAY 2.50m-12.00m WEATHERED BASALT AND LAYERS OF CLAY 12.00m-16.00m WEATHERED BASALT 16.00m-16.50m BASALT	0.00m-12.00m INNER LINING - CASING = Galvanised Iron 12.00m-16.50m INNER LINING - SCREEN = Galvanised Iron		12.00m-16.50m Basalt	12/04/1985	1820 m	North
57348	Domestic, Stock	0.00m-0.30m SURFACE SOIL 0.30m-1.52m CLAY 1.52m-3.66m BASALTIC DECOMPOSED CLAY 3.66m-6.70m DECOMPOSED BASALT 6.70m-12.80m WEATHERED BASALT	0.00m-6.40m INNER LINING - CASING = Not Known 6.10m-12.19m INNER LINING - SCREEN = Not Known		6.10m-12.19m	05/12/1974	1839 m	North
WRK979016							1842 m	South West
WRK041372	Irrigation	0.00m-0.30m TOPSOIL 0.30m-1.00m YELLOW CLAY 1.00m-5.00m HARD RED ORANGE AND GREY CLAY 5.00m-15.00m SANDY CLAY 15.00m-25.00m GREEN SILTY CLAY 25.00m-26.50m SOFT LIMESTONE 26.50m-27.50m HARD LIMESTONE 27.50m-51.00m SOFT AND FIRM MUDSTONE 51.00m-86.00m HARD MUDSTONE	-0.30m-27.50m INNER LINING - CASING = Not Known 0.00m-28.00m INNER LINING - CASING = Pvc 28.00m-52.00m INNER LINING - CASING = Abs Plastic 52.00m-86.00m INNER LINING - SCREEN = Abs Plastic		52.00m-86.00m Mudstone	20/04/1997	1858 m	South East
WRK969669	Domestic & Stock	0.00m-0.50m TOPSOIL 0.50m-2.80m BROWN SANDY CLAY 2.80m-5.00m BROWN CLAY 5.00m-10.00m BROWN SAND 10.00m-16.00m FINE WHITE SAND	0.00m-9.00m INNER LINING - CASING = Pvc 9.00m-12.00m INNER LINING - SCREEN = Stainless Steel 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-12.00m OUTER LINING - GRAVEL = Gravel			10/05/2005	1867 m	North
57386	Domestic, Stock	0.00m-0.20m TOPSOIL 0.20m-4.00m DARK GREY CLAY 4.00m-13.75m SOFT BASALT	0.00m-11.25m INNER LINING - CASING = Pvc 11.25m-13.75m INNER LINING - SCREEN = Pvc		11.25m-13.75m Basalt	08/03/1979	1869 m	North
91586	Domestic, Stock	0.00m-0.30m BROWN CLAYEY SOIL 0.30m-1.82m BLACK CLAY 1.82m-3.05m YELLOW AND BLACK CLAY 3.05m-5.18m YELLOW CLAY 5.18m-6.40m SANDY WHITE CLAY 6.40m-7.62m SOUPY RED SAND 7.62m-10.76m REDDISH SOUPY FATTY SAND 10.76m-16.76m BLACK MARL 16.76m-17.68m GREY MARL AND LUMPS OF LIMESTONE ROCK 17.68m-21.64m SEA SHELLS AND SAND LIKE SUGAR	0.00m-17.67m INNER LINING - CASING = Not Known 17.67m-21.64m INNER LINING - SCREEN = Not Known		17.67m-21.64m	19/11/1970	1871 m	East
57340	Domestic, Stock	0.00m-0.30m TOPSOIL 0.30m-3.30m CLAY 3.30m-16.00m BASALT	0.00m-5.84m INNER LINING - CASING = Pvc			24/02/1975	1872 m	North
WRK041405	Miscellaneous		0.00m-38.00m INNER LINING - CASING = Galvanised Iron 66.00m-76.00m INNER LINING - SCREEN = Galvanised Iron		66.00m-76.00m	03/10/1987	1872 m	North West
WRK962916	Domestic & Stock, Irrigation	0.00m-0.30m TOPSOIL 0.30m-3.00m DARK GREY CLAY 3.00m-7.00m HARD ORANGE CLAY 7.00m-13.00m WEATHERED BASALT 13.00m-27.00m LIGNIOUS CLAY 27.00m-27.30m MEDIUM SAND 27.30m-29.00m LIGNIOUS CLAY 29.00m-29.20m MEDIUM SAND 29.20m-30.00m LIGNIOUS CLAY	-2.00m-27.00m INNER LINING - CASING = Pvc 27.00m-30.00m INNER LINING - SLOT = Pvc 0.00m-3.00m OUTER LINING - GRAVEL = Cement 3.00m-29.00m OUTER LINING - GRAVEL = Gravel			16/10/2003	1880 m	North
91662	Domestic, Stock	0.00m-0.76m GREY DARK LOAM SOIL 0.76m-0.91m DARK BROWN STONES 0.91m-6.10m GREY BROWN STONEY CLAY 6.10m-8.53m GREY CLAY 8.53m-24.38m BROWN SAND SOTNE 24.38m-25.90m MUDSTONE	0.00m-8.99m INNER LINING - CASING = Galvanised Iron 8.99m-25.90m INNER LINING - SCREEN = Galvanised Iron		8.99m-25.90m Sandstone	16/04/1980	1890 m	South
91615	Not Known	0.00m-0.91m SUB SOIL 0.91m-3.96m RED RADDLE CLAY 3.96m-5.18m VERY HARD RED CLAY 5.18m-11.28m GREY CONSOLIDATED SANDS 11.28m-17.37m CONSOLIDATED BLACK SANDS 17.37m-20.42m GREEN CONSOLIDATED SANDS 20.42m-27.13m CONSOLIDATED SHELL SANDS 27.13m-28.96m LIMESTONE(COARSE SHELL IN SOME) 28.96m-36.57m MUDSTONE	0.00m-36.57m INNER LINING - CASING = Not Known			28/11/1972	1892 m	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
57389	Domestic	0.00m-0.50m TOP SOIL 0.50m-3.00m GREY CLAY 3.00m-12.00m VOLCANIC CLAY 12.00m-14.00m WHITE CLAY 14.00m-28.00m HONEYCOMB BASALT	0.00m-20.00m INNER LINING - CASING = Pvc 20.00m-28.00m INNER LINING - SCREEN = Pvc		20.00m-28.00m Basalt	26/11/1980	1894 m	North East
91303	Irrigation		0.00m-26.52m INNER LINING - CASING = Galvanised Iron 26.52m-29.87m INNER LINING - SCREEN = Galvanised Iron		26.52m-29.87m Sand	31/12/1968	1911 m	South East
91431	Stock					31/12/1932	1911 m	East
WRK041407	Domestic, Dairy, Stock					31/12/1969	1913 m	East
57344	Domestic, Stock	0.00m-0.30m HEAVY BROWN SOIL 0.30m-1.83m BROWN CLAY 1.83m-15.24m SOFT BASALT 15.24m-24.38m HARD BASALT	0.00m-3.66m INNER LINING - CASING = Not Known			08/05/1975	1917 m	North
WRK062415	Observation	0.00m-0.20m SOIL 0.20m-0.60m CLAY 0.60m-15.00m MUDSTONE	0.00m-15.00m INNER LINING - CASING = Pvc 0.00m-15.00m OUTER LINING - GRAVEL = Cement		0.00m-15.00m Mudstone	24/05/2011	1919 m	West
WRK989138							1934 m	North
WRK992188							1942 m	North
57339	Domestic, Stock	0.00m-0.30m SURFACE SOIL 0.30m-1.52m CLAY 1.52m-3.66m BASALTIC DECOMPOSED CLAY 3.66m-6.70m DECOMPOSED BASALT 6.70m-12.19m WEATHERED BASALT	0.00m-6.40m INNER LINING - CASING = Not Known 6.09m-12.19m INNER LINING - SCREEN = Not Known		6.09m-12.19m	04/12/1974	1958 m	North
57332	Domestic, Stock	0.00m-1.00m TOP SOIL 1.00m-3.00m CLAY 3.00m-18.00m DECAYED BASALT	0.00m-6.69m INNER LINING - CASING = Galvanised Iron 4.69m-18.00m INNER LINING - CASING = Pvc 15.00m-18.00m INNER LINING - SCREEN = Pvc		15.00m-18.00m	04/03/1976	1961 m	North
91619	Stock	0.00m-1.22m SAND 1.22m-1.83m CLAY 1.83m-12.19m SAND 12.19m-24.08m SILT 24.08m-29.56m LIMESTONE	0.00m-24.97m INNER LINING - CASING = Steel 23.67m-29.56m INNER LINING - CASING = Pvc 24.99m-29.56m INNER LINING - SCREEN = Pvc		24.99m-29.56m	15/12/1972	1974 m	East
WRK988234							1974 m	South West
WRK046714	Domestic & Stock	0.00m-0.50m TOP SOIL 0.50m-4.00m CLAY 4.00m-12.00m SANDY CLAY 12.00m-15.00m SAND 15.00m-17.00m CLAY 17.00m-20.00m VOLCANIC CLAY 20.00m-21.00m BASALT 21.00m-30.00m BROKEN BASALT 30.00m-31.00m RUBBLE	0.00m-21.00m INNER LINING - CASING = Pvc 6.00m-20.50m OUTER LINING - GRAVEL = Bentonite 20.50m-31.00m OUTER LINING - GRAVEL = Packer			03/04/2004	1979 m	East
57417	Domestic, Stock	0.00m-0.76m HEAVY BLACK SOIL 0.76m-1.22m YELLOW RUSTY CLAY 1.22m-1.83m GREY CLAY 1.83m-11.58m DECOMPOSED BASALTIC CLAY 11.58m-12.19m GREY YELLOW SANDY CLAY 12.19m-14.17m GREY FATTY SAND	0.00m-12.19m INNER LINING - CASING = Galvanised Iron 12.19m-14.17m INNER LINING - SCREEN = Galvanised Iron 11.89m-0.00m OUTER LINING - GRAVEL = Seal		12.19m-14.17m Sand	04/10/1982	1982 m	North
WRK041382	Irrigation	0.00m-0.30m TOP SOIL 0.30m-4.00m CLAY 4.00m-8.00m SANDY CLAY 8.00m-12.00m CLAY 12.00m-29.00m BASALT HARD & BROWN	-0.30m-29.00m INNER LINING - CASING = Pvc 0.00m-12.00m INNER LINING - CASING = Pvc 15.00m-29.00m INNER LINING - SCREEN = Pvc 3.00m-12.00m OUTER LINING - GRAVEL = Cement 10.00m-12.00m OUTER LINING - GRAVEL = Bentonite		15.00m-29.00m Basalt	15/04/1998	1992 m	East

Groundwater Boreholes

Devon Road, Cranbourne East, VIC 3977

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)	Dir
91296		Private Individual/Corporation	Irrigation			15/12/1970	24.38		100	0m	On-site
91299		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1969	45.72		100	0m	On-site
91590		Private Individual/Corporation	Irrigation	Percussion (cable)		11/02/1971	17.07		100	0m	On-site
91590		Private Individual/Corporation	Stock/Poultry water supply	Percussion (cable)		11/02/1971	17.07		100	0m	On-site
91684		Private Individual/Corporation	Irrigation	Percussion (cable)		28/02/1982	48.77		100	0m	On-site
91691		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		21/02/1982	30.48		100	0m	On-site
91693		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		09/03/1983	27.43		100	0m	On-site
91700		Private Individual/Corporation	Industrial/commercial water	Percussion (cable)	Abandoned	11/08/1983	15.08		100	0m	On-site
91701		Private Individual/Corporation	Industrial/commercial water	Percussion (cable)		25/08/1983	32.10		100	0m	On-site
91707		Private Individual/Corporation		Percussion (cable)	Abandoned	13/01/1984	24.00		100	0m	On-site
91709		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		03/07/1982	88.30		100	0m	On-site
91702		Private Individual/Corporation	Domestic water supply	Percussion (cable)		19/09/1983	15.80		100	24m	South East
91744		Private Individual/Corporation	Domestic water supply	Percussion (cable)		19/11/1986	21.50		100	24m	South East
57458		Private Individual/Corporation	Domestic water supply	Percussion (cable)		24/10/1983	22.86		100	55m	South
91725		Private Individual/Corporation	Domestic water supply	Percussion (cable)		27/11/1984	14.30		100	60m	South
91611		Private Individual/Corporation	Irrigation	Percussion (cable)		01/06/1973	20.12		100	90m	East
91214		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1965	13.72		100	173m	North West
91252		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1965	13.72		100	184m	South East
91252		Private Individual/Corporation	Stock/Poultry water supply	Percussion (cable)		31/12/1965	13.72		100	184m	South East
91675		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		17/01/1981	30.48		100	193m	East

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Dir
91685		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		12/09/1982	30.78		100	199m	East
91703		Private Individual/Corporation	Domestic water supply	Percussion (cable)		19/09/1983	30.55		100	215m	North West
91277		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		31/12/1964	33.53		100	245m	North East
305321		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		14/02/1983	17.37		100	292m	South East
57481		Private Individual/Corporation	Irrigation	Percussion (cable)		31/01/1984	32.00		100	320m	East
91742		Private Individual/Corporation	Irrigation	Percussion (cable)		30/09/1983	44.81		100	333m	East
91687		Private Individual/Corporation	Irrigation	Percussion (cable)		19/12/1980	21.95		100	444m	South East
91692		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		08/03/1983	49.07		100	664m	North East
91697		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		07/09/1983	43.28		100	687m	North East
91307		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1967	34.14		100	792m	South East
91307		Private Individual/Corporation	Stock/Poultry water supply	Percussion (cable)		31/12/1967	34.14		100	792m	South East
91740		Private Individual/Corporation	Irrigation	Percussion (cable)		11/11/1983	34.75		100	852m	East
91741		Private Individual/Corporation	Irrigation	Percussion (cable)		26/01/1984	32.00		100	852m	East
91695		Private Individual/Corporation	Irrigation	Percussion (cable)		12/04/1983	51.82		100	865m	East
91075		Department of Manufacturing & Industry Development	Groundwater Observation	Percussion (cable)		09/05/1980	54.00	32.25	10	930m	East
57470		Private Individual/Corporation	Irrigation	Air Percussion/Air Rotary		03/06/1985	98.00		100	1080 m	North West
91730		Private Individual/Corporation	Domestic water supply	Air Percussion/Air Rotary		02/04/1985	31.10		100	1098 m	South
91729		Private Individual/Corporation	Irrigation	Percussion (cable)		26/01/1985	39.62		100	1134 m	East
57325		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		06/04/1977	31.40		100	1189 m	North East
91710		Private Individual/Corporation		Percussion (cable)	Abandoned	16/01/1984	16.00		100	1196 m	South West
91686		Private Individual/Corporation		Percussion (cable)	Abandoned	08/09/1982	13.60		100	1238 m	South West
91673		Private Individual/Corporation		Percussion (cable)	Abandoned	19/10/1981	12.50		100	1274 m	South West
57410		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		20/12/1981	42.98		100	1328 m	North East
57225		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		31/12/1968	38.71		100	1365 m	North East

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Dir
57411		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		17/12/1981	42.98		100	1421 m	North East
91699		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		16/08/1983	22.86		100	1479 m	East
57412		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		02/02/1982	13.15		100	1591 m	North
57184		Private Individual/Corporation		Percussion (cable)	Abandoned	23/10/1987	93.00		100	1630 m	North West
91682		Private Individual/Corporation	Domestic water supply	Percussion (cable)		13/08/1982	12.19		100	1648 m	South West
57183		Private Individual/Corporation	Groundwater Investigation	Percussion (cable)		16/10/1987	93.00		100	1681 m	North West
57366		Private Individual/Corporation	Stock/Poultry water supply	Air Percussion/Air Rotary		20/04/1977	31.40		100	1731 m	North
57429		Private Individual/Corporation	Domestic water supply	Percussion (cable)		26/07/1983	15.75		100	1743 m	North
57467		Private Individual/Corporation	Domestic water supply	Percussion (cable)		12/04/1985	16.50		100	1820 m	North
91706		Private Individual/Corporation	Irrigation	Percussion (cable)		07/12/1984	39.62		100	1855 m	South East
57181		Private Individual/Corporation	Groundwater Investigation	Percussion (cable)		03/10/1987	88.00		100	1874 m	North West
91298		Private Individual/Corporation	Irrigation			16/12/1970	29.87		100	1975 m	East
57417		Private Individual/Corporation	Domestic & Stock water supply	Percussion (cable)		04/10/1982	14.17		100	1983 m	North

Boreholes (Federation University)

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

Bore Id	Authority	Type	Uses	Initial TD	Log	Dist (m)	Dir
N/A	No records in buffer						

Historical Mining Activity - Shafts

Devon Road, Cranbourne East, VIC 3977

Historical Mining Activity - Shafts

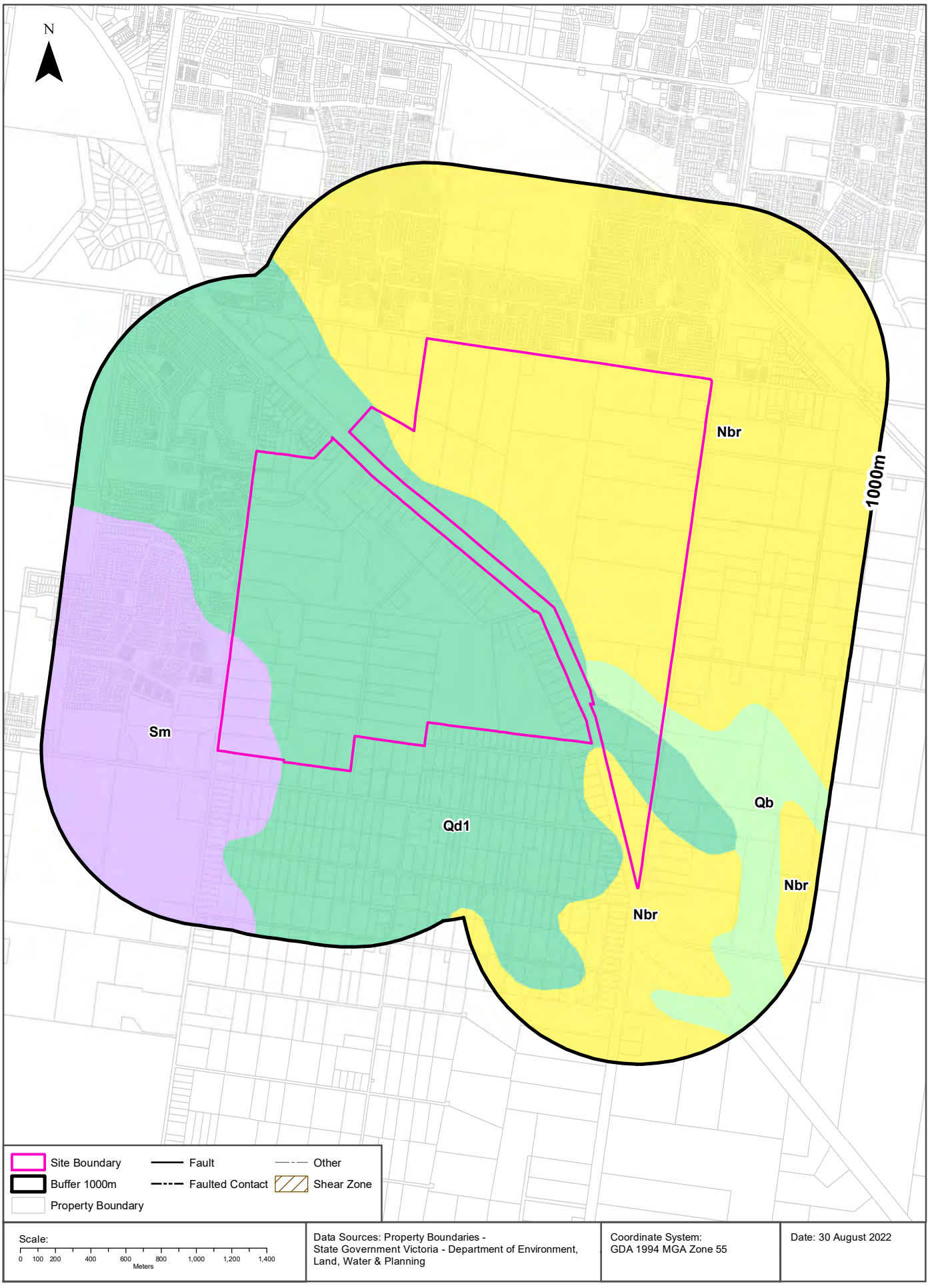
Mine Shaft Locations were collected by a variety of methods from 1869 in some areas of the state, mainly concentrating in Ballarat and Bendigo. In places a shaft may be recorded multiple times with a different source. In cases where several shaft locations are shown close together (generally with separations 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								

Geology

Devon Road, Cranbourne East, VIC 3977



Geology

Devon Road, Cranbourne East, VIC 3977

Geological Units 1:250,000

What are the Geological Units within the dataset buffer?

Symbol	Name	Description	Geological Age	Lithology	Distance	Direction
Qd1	inland dune deposits (Qd1): generic	Sand, silt, clay: friable to consolidated; well sorted; includes both lunette deposits and deposits of longitudinal dunes	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant)	0m	On-site
Nbr	Red Bluff Sandstone (Nbr): generic	Sandstone, conglomerate: pale yellow and brown; fine to coarse-grained, massive to well bedded; cross-bedded; local ironstone	Miocene to Pliocene	conglomerate (significant); sandstone (significant)	0m	On-site
Sm	Murrindindi Supergroup(Sm): generic	Siltstone, shale, sandstone, rare conglomerate and limestone; sandstone typically quartz-rich in the lower part and lithic in the upper part; siltstone commonly bioturbated; marine to fluvial	Late Ordovician to Middle Devonian	siltstone (major proportion); sandstone (significant); quartz arenite (minor proportion); shale (minor proportion)	0m	On-site
Qb	alluvium and colluvium(Qb): generic	Sand, silt, clay, gravel, diamictite; alluvial and colluvial deposits	Quaternary to Quaternary	sand (significant); silt material (significant); clay lithology (significant); gravel material (significant)	0m	On-site

Geology

Devon Road, Cranbourne East, VIC 3977

Geological Structures 1:250,000

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

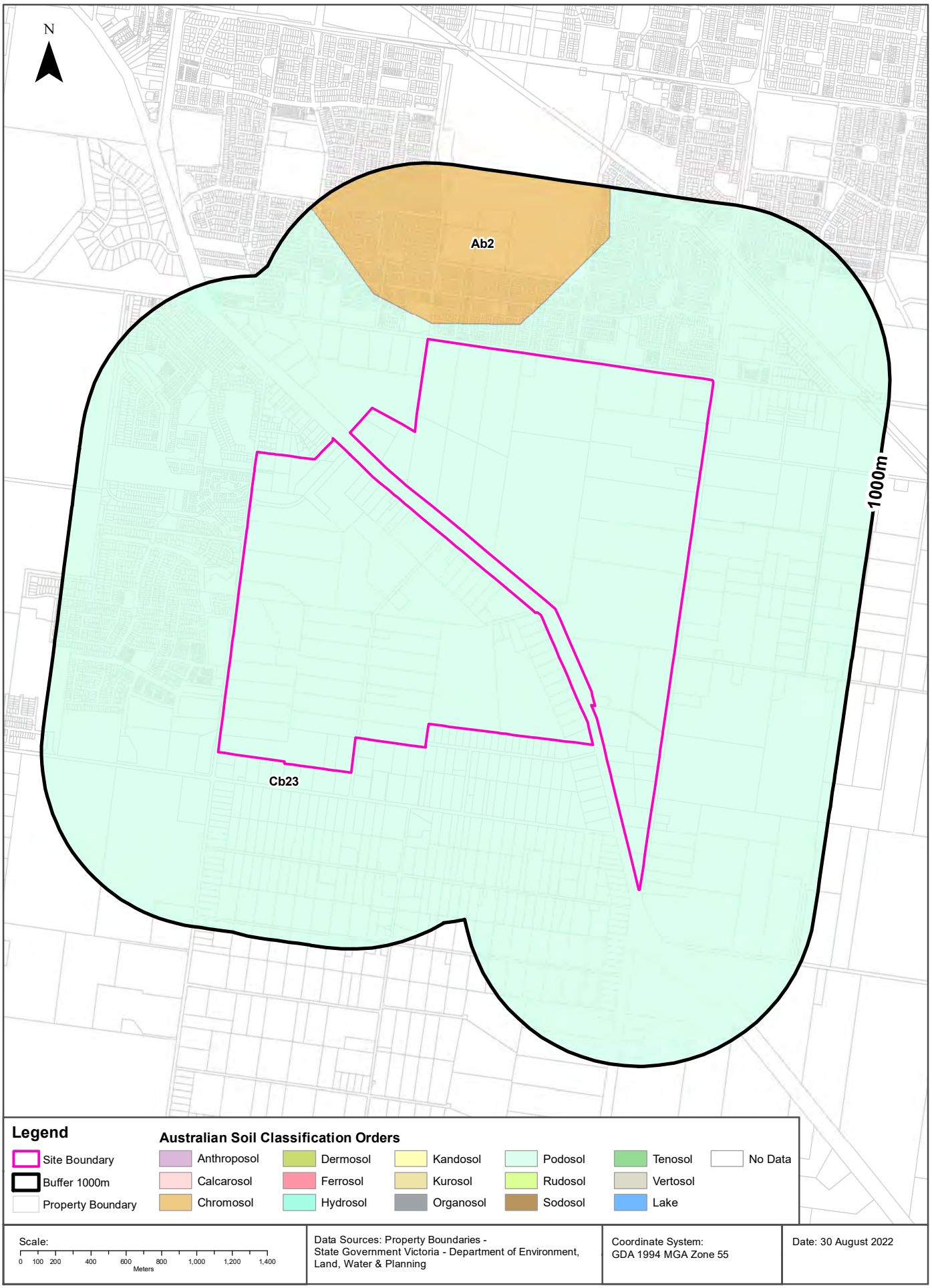
Map Id	Type	Name	Contact	Positional Accuracy	Distance	Direction
N/A	No records in buffer					

What are the Shear Zones within the dataset buffer?

Map Id	Type	Name	Description	Positional Accuracy	Distance	Direction
N/A	No records in buffer					

Atlas of Australian Soils

Devon Road, Cranbourne East, VIC 3977



Soils

Devon Road, Cranbourne East, VIC 3977

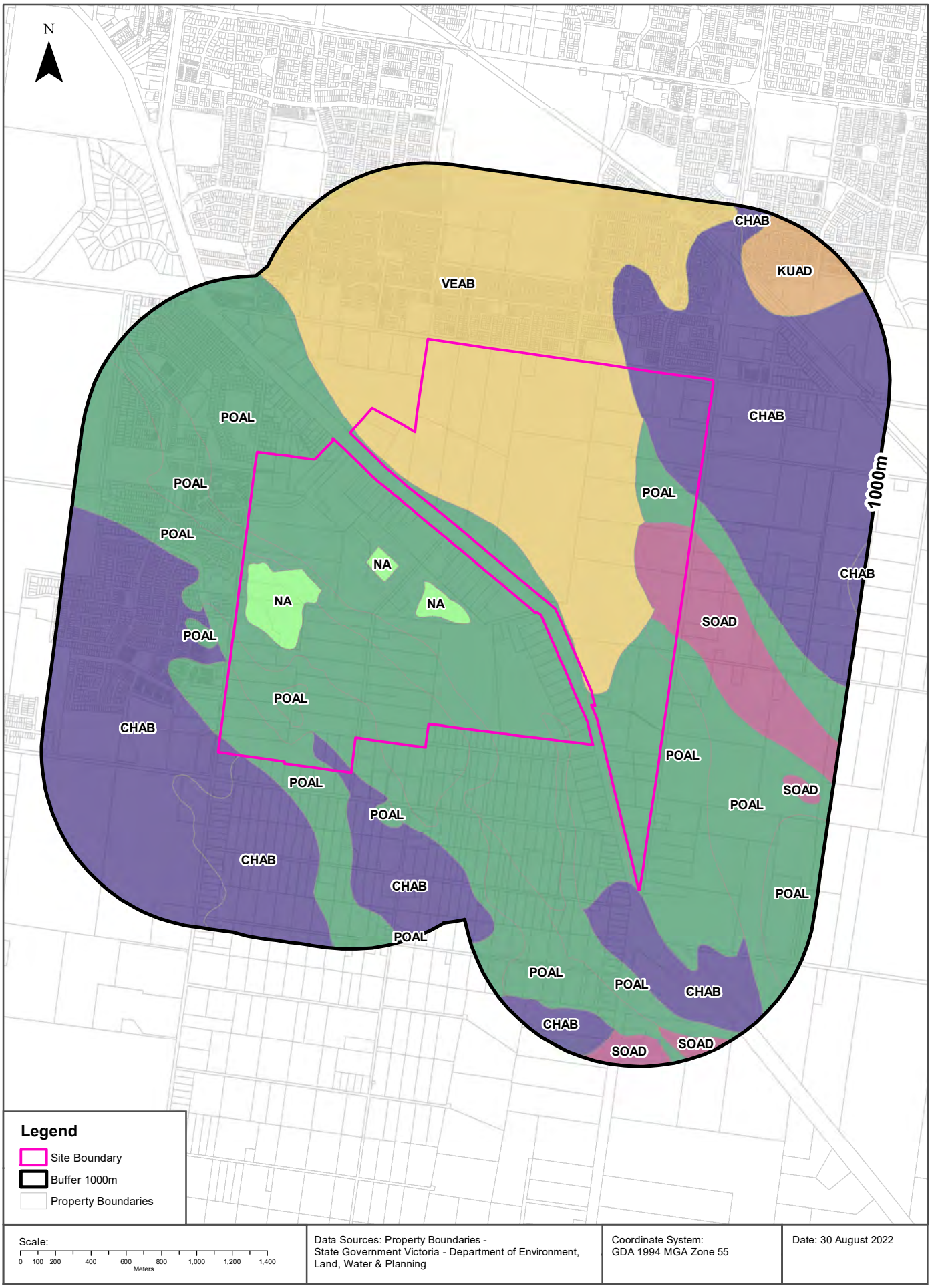
Atlas of Australian Soils

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

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Cb23	Podosol	Coastal plains: plains of leached sands (Uc2.33) and other (Uc2.3) soils in association with sandy acidic yellow mottled soils (Dy5.41 and Dy5.81) and small areas of (Dy3.4) soils with dunes of leached sands, (Uc2.2) on dune crests. and (Uc2.3) on dune slopes; and with small swampy areas and possibly some lunettes both with undescribed soils.	0m	On-site
Ab2	Chromosol	Gently undulating area of friable neutral dark soils (Dd3.12) and cracking dark clays (Ug6.1), possibly with other soils as well.	91m	North

Victorian Soil Type Mapping

Devon Road, Cranbourne East, VIC 3977



Soils

Devon Road, Cranbourne East, VIC 3977

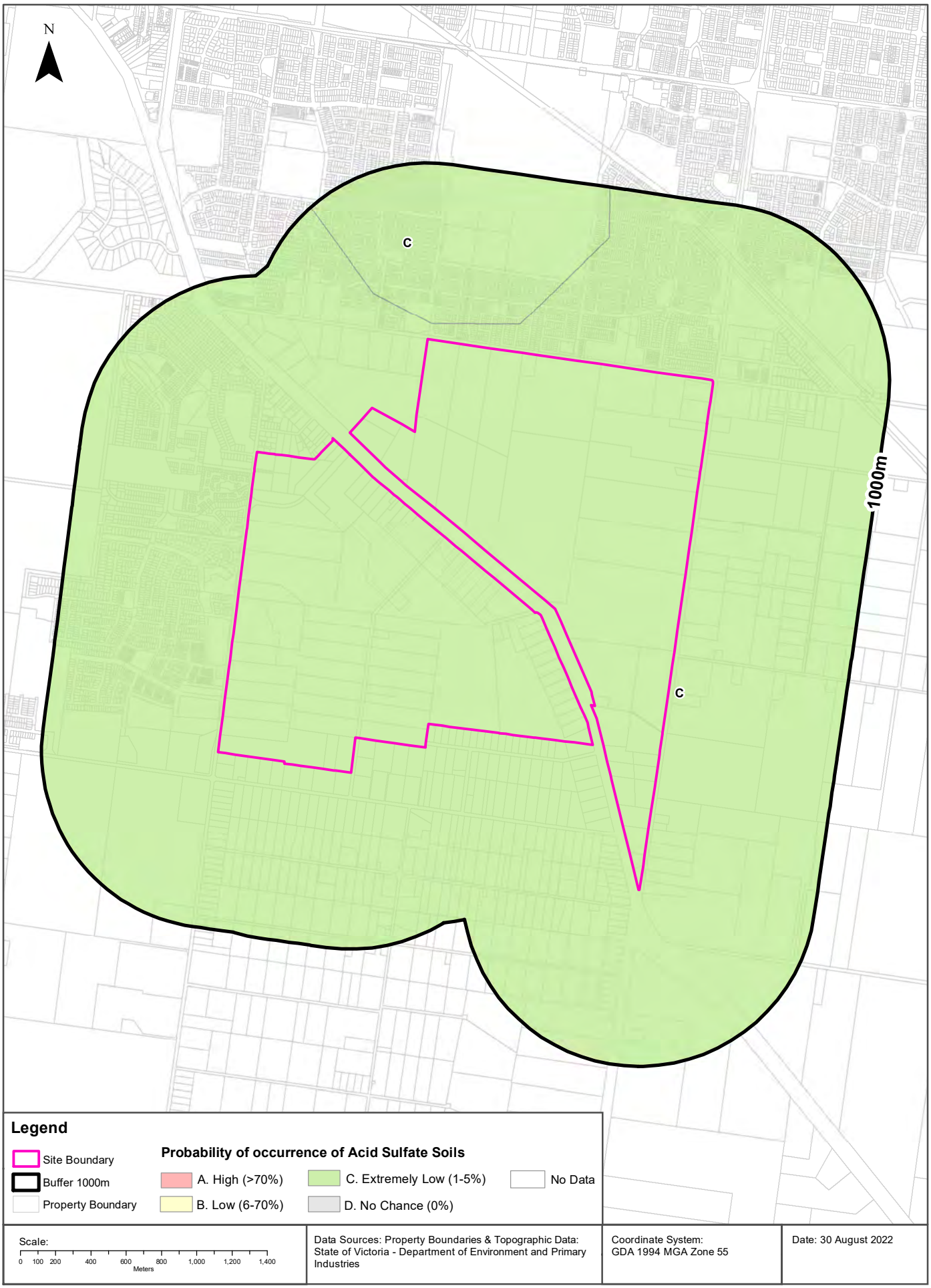
Victorian Soil Type Mapping

Victorian Soil Types within the dataset buffer:

Symbol	Description	Distance	Direction
POAL	Aeric Podosols	0m	On-site
VEAB	Brown Vertosols	0m	On-site
CHAB	Brown Chromosols	0m	On-site
SOAD	Grey Sodosols	0m	On-site
NA	Unassigned	0m	On-site
KUAD	Grey Kurosols	504m	North East

Atlas of Australian Acid Sulfate Soils

Devon Road, Cranbourne East, VIC 3977



Acid Sulfate Soils

Devon Road, Cranbourne East, VIC 3977

Atlas of Australian Acid Sulfate Soils

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

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

Acid Sulfate Soils

Devon Road, Cranbourne East, VIC 3977

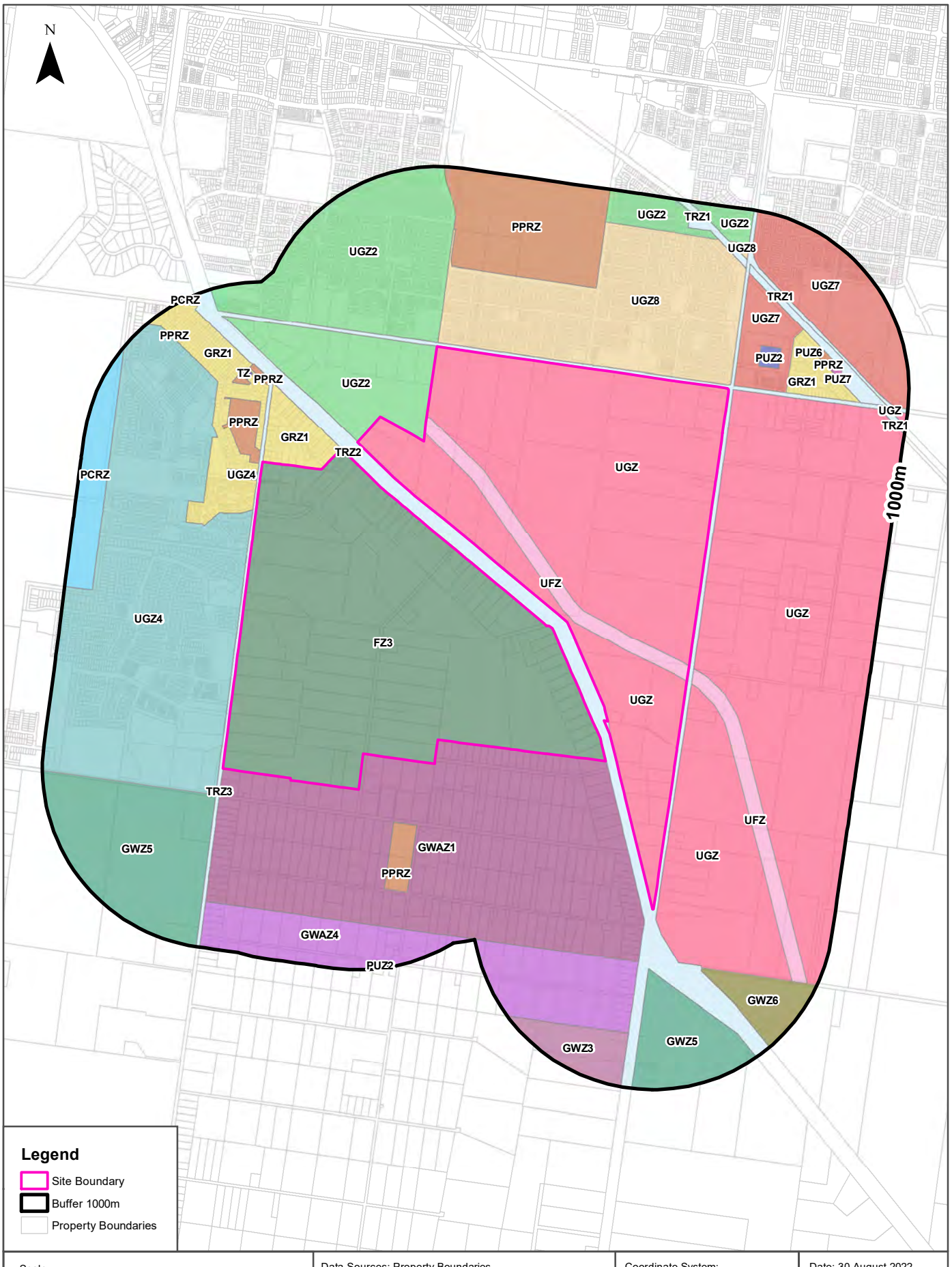
Coastal Acid Sulfate Soils

Coastal Acid Sulfate Soil types within the dataset buffer:

Coastal Acid Sulfate Soil Types	Distance	Direction
No records in buffer		

Planning Zones

Devon Road, Cranbourne East, VIC 3977



Planning

Devon Road, Cranbourne East, VIC 3977

Planning Zones

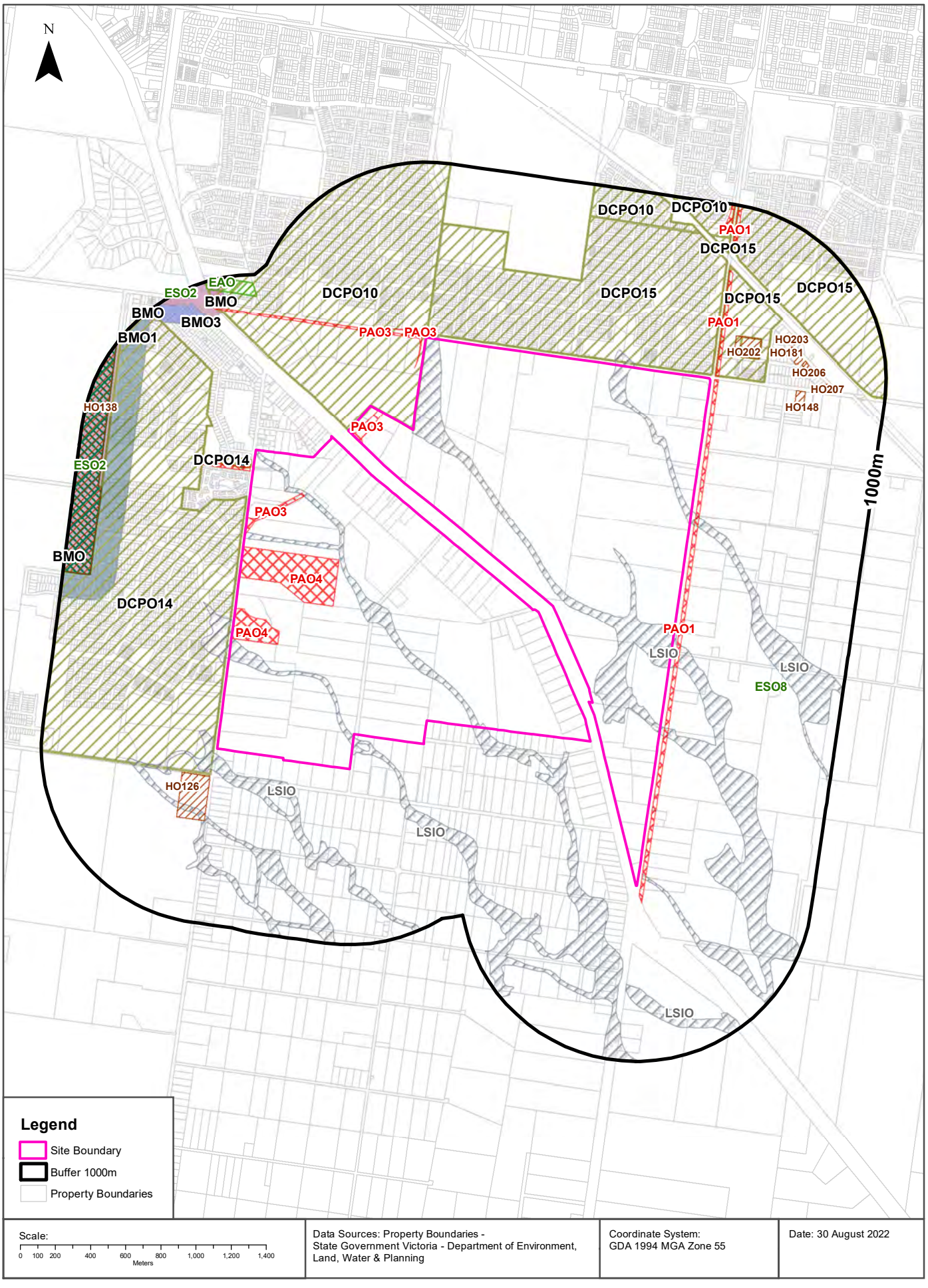
Planning zones within the dataset buffer:

Zone Code	Description	Distance	Direction
FZ3	FARMING ZONE - SCHEDULE 3	0m	On-site
UGZ	URBAN GROWTH ZONE	0m	On-site
UFZ	URBAN FLOODWAY ZONE	0m	On-site
TRZ2	TRANSPORT ZONE 2 - PRINCIPAL ROAD NETWORK	0m	South East
UGZ2	URBAN GROWTH ZONE - SCHEDULE 2	0m	North West
GWAZ1	GREEN WEDGE A ZONE - SCHEDULE 1	0m	South
TRZ3	TRANSPORT ZONE 3 - SIGNIFICANT MUNICIPAL ROAD	0m	West
GRZ1	GENERAL RESIDENTIAL ZONE - SCHEDULE 1	0m	North West
UGZ	URBAN GROWTH ZONE	17m	South East
UGZ8	URBAN GROWTH ZONE - SCHEDULE 8	18m	North East
GRZ1	GENERAL RESIDENTIAL ZONE - SCHEDULE 1	19m	North West
PPRZ	PUBLIC PARK AND RECREATION ZONE	20m	North West
UGZ4	URBAN GROWTH ZONE - SCHEDULE 4	20m	West
UGZ4	URBAN GROWTH ZONE - SCHEDULE 4	20m	North West
UGZ	URBAN GROWTH ZONE	21m	East
UGZ2	URBAN GROWTH ZONE - SCHEDULE 2	21m	North
UFZ	URBAN FLOODWAY ZONE	23m	South East
UGZ7	URBAN GROWTH ZONE - SCHEDULE 7	33m	North East
GWZ5	GREEN WEDGE ZONE - SCHEDULE 5	153m	South West
PUZ2	PUBLIC USE ZONE - EDUCATION	207m	North East
PPRZ	PUBLIC PARK AND RECREATION ZONE	262m	South
GWAZ4	GREEN WEDGE A ZONE - SCHEDULE 4	302m	South
GRZ1	GENERAL RESIDENTIAL ZONE - SCHEDULE 1	315m	North East
GWZ5	GREEN WEDGE ZONE - SCHEDULE 5	331m	South East
GWZ6	GREEN WEDGE ZONE - SCHEDULE 6	417m	South East
PPRZ	PUBLIC PARK AND RECREATION ZONE	431m	North West
PPRZ	PUBLIC PARK AND RECREATION ZONE	437m	North West
PPRZ	PUBLIC PARK AND RECREATION ZONE	449m	North
TZ	TOWNSHIP ZONE	465m	North West
PUZ6	PUBLIC USE ZONE - LOCAL GOVERNMENT	470m	North East
PPRZ	PUBLIC PARK AND RECREATION ZONE	523m	North East
TRZ1	TRANSPORT ZONE 1 - STATE TRANSPORT INFRASTRUCTURE	526m	North East

Zone Code	Description	Distance	Direction
PUZ7	PUBLIC USE ZONE - OTHER PUBLIC USE	571m	North East
UGZ7	URBAN GROWTH ZONE - SCHEDULE 7	585m	North East
TRZ1	TRANSPORT ZONE 1 - STATE TRANSPORT INFRASTRUCTURE	672m	North East
GWZ3	GREEN WEDGE ZONE - SCHEDULE 3	699m	South
UGZ8	URBAN GROWTH ZONE - SCHEDULE 8	719m	North East
UGZ2	URBAN GROWTH ZONE - SCHEDULE 2	804m	North East
UGZ2	URBAN GROWTH ZONE - SCHEDULE 2	805m	North East
PPRZ	PUBLIC PARK AND RECREATION ZONE	834m	North West
TRZ1	TRANSPORT ZONE 1 - STATE TRANSPORT INFRASTRUCTURE	843m	East
PCRZ	PUBLIC CONSERVATION AND RESOURCE ZONE	844m	West
UGZ	URBAN GROWTH ZONE	899m	East
PUZ2	PUBLIC USE ZONE - EDUCATION	958m	South
PUZ6	PUBLIC USE ZONE - LOCAL GOVERNMENT	982m	South

Planning Overlays

Devon Road, Cranbourne East, VIC 3977



Planning

Devon Road, Cranbourne East, VIC 3977

Planning Overlays

Planning overlays within the dataset buffer:

Zone Code	Description	Distance	Direction
LSIO	LAND SUBJECT TO INUNDATION OVERLAY	0m	On-site
PAO4	PUBLIC ACQUISITION OVERLAY 4	0m	On-site
PAO3	PUBLIC ACQUISITION OVERLAY 3	0m	On-site
DCPO10	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 10	0m	North West
PAO1	PUBLIC ACQUISITION OVERLAY 1	17m	East
DCPO15	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 15	18m	North East
PAO3	PUBLIC ACQUISITION OVERLAY 3	19m	West
DCPO14	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 14	20m	North West
DCPO14	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 14	20m	West
PAO3	PUBLIC ACQUISITION OVERLAY 3	24m	North West
PAO3	PUBLIC ACQUISITION OVERLAY 3	32m	North
DCPO15	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 15	34m	North East
PAO1	PUBLIC ACQUISITION OVERLAY 1	34m	North East
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	53m	North West
HO126	HERITAGE OVERLAY (HO126)	164m	South West
HO202	HERITAGE OVERLAY (HO202)	186m	North East
HO181	HERITAGE OVERLAY (HO181)	449m	North East
HO205	HERITAGE OVERLAY (HO205)	481m	North East
HO148	HERITAGE OVERLAY (HO148)	491m	North East
HO203	HERITAGE OVERLAY (HO203)	497m	North East
HO182	HERITAGE OVERLAY (HO182)	523m	North East
HO206	HERITAGE OVERLAY (HO206)	536m	North East
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	584m	East
DCPO15	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 15	585m	North East
HO207	HERITAGE OVERLAY (HO207)	652m	North East
BMO1	BUSHFIRE MANAGEMENT OVERLAY - SCHEDULE 1	694m	West
DCPO15	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 15	720m	North East
PAO1	PUBLIC ACQUISITION OVERLAY 1	761m	North East
BMO3	BUSHFIRE MANAGEMENT OVERLAY - SCHEDULE 3	770m	North West
BMO	BUSHFIRE MANAGEMENT OVERLAY	773m	West
DCPO10	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 10	805m	North East

Zone Code	Description	Distance	Direction
DCPO10	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 10	808m	North East
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	844m	West
HO138	HERITAGE OVERLAY (HO138)	845m	West
PAO1	PUBLIC ACQUISITION OVERLAY 1	849m	North East
EAO	ENVIRONMENTAL AUDIT OVERLAY	877m	North West

Heritage

Devon Road, Cranbourne East, VIC 3977

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							

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							

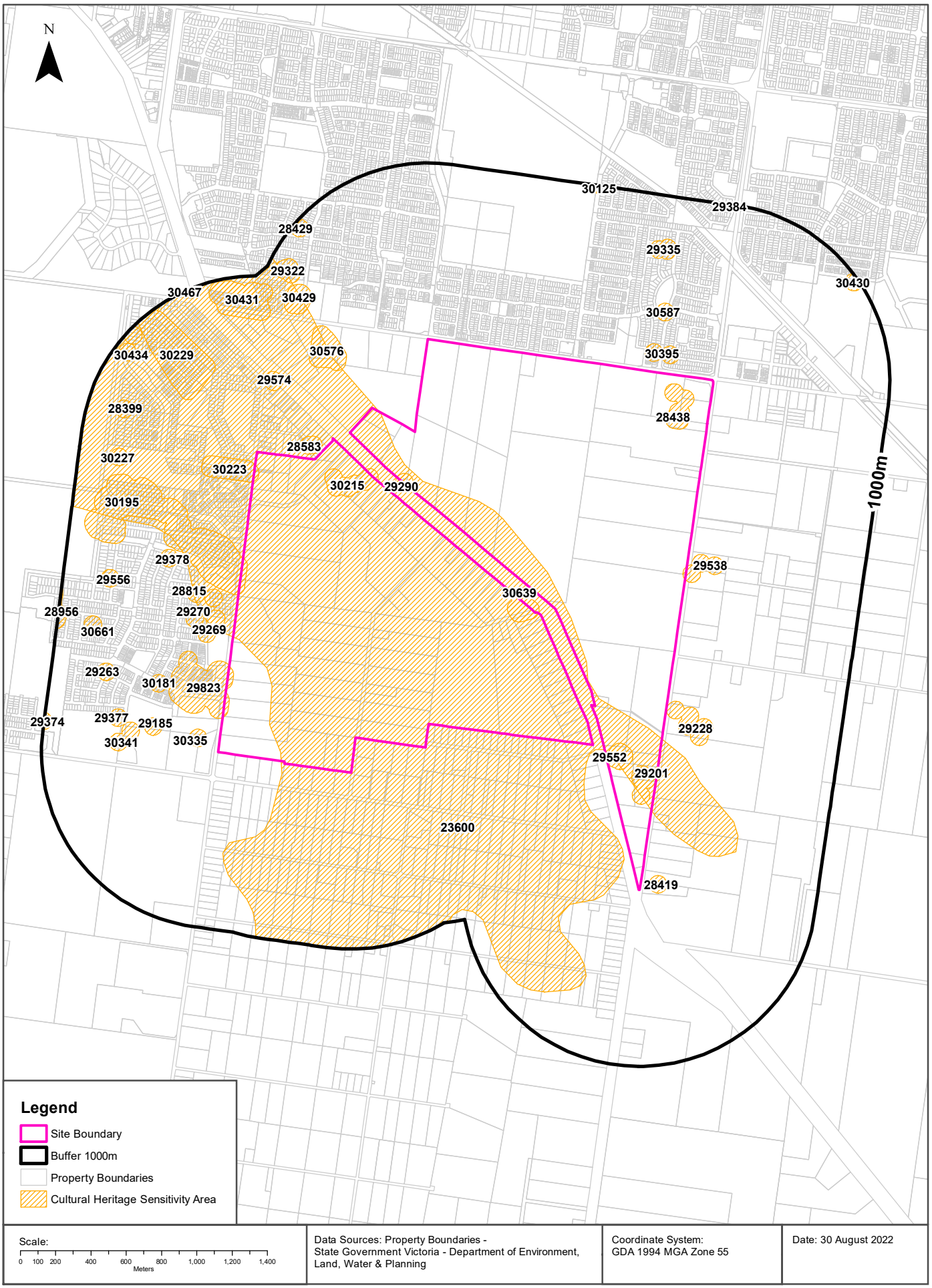
Victorian Heritage Register

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

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

Cultural Heritage Sensitivity

Devon Road, Cranbourne East, VIC 3977



Heritage

Devon Road, Cranbourne East, VIC 3977

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
23600	0m	On-site
30215	0m	On-site
28438	0m	On-site
29201	0m	On-site
29552	0m	On-site
30639	0m	On-site
29823	0m	On-site
30195	0m	On-site
29290	0m	On-site
30223	0m	On-site
29538	0m	On-site
29228	3m	South East
28583	14m	North West
28419	48m	South East
29269	58m	West
30395	58m	North East
30335	73m	South West
30667	88m	West
29270	179m	West
28815	188m	West
30576	280m	North West
30587	295m	North East
29185	333m	South West
30181	335m	West
29574	357m	North West
29378	366m	West
30341	457m	South West
30229	473m	North West
29377	537m	West
29263	638m	West
29335	641m	North East

Map Id	Distance	Direction
30429	669m	North West
29556	684m	West
30227	721m	West
28399	742m	North West
30431	748m	North West
30661	748m	West
29322	808m	North West
30434	878m	North West
28429	912m	North West
30430	925m	North East
28956	950m	West
30125	954m	North
29374	956m	West
29384	971m	North East
30467	992m	North West

Natural Hazards

Devon Road, Cranbourne East, VIC 3977

Natural Hazards

Devon Road, Cranbourne East, VIC 3977

Bushfire Prone Areas

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

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
27	Designated Bushfire Prone Area	LEGL./22-096	CASEY	18/03/2022	0m	On-site

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
N/A	No records in buffer									

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
N/A	No records in buffer					

Natural Hazards

Devon Road, Cranbourne East, VIC 3977

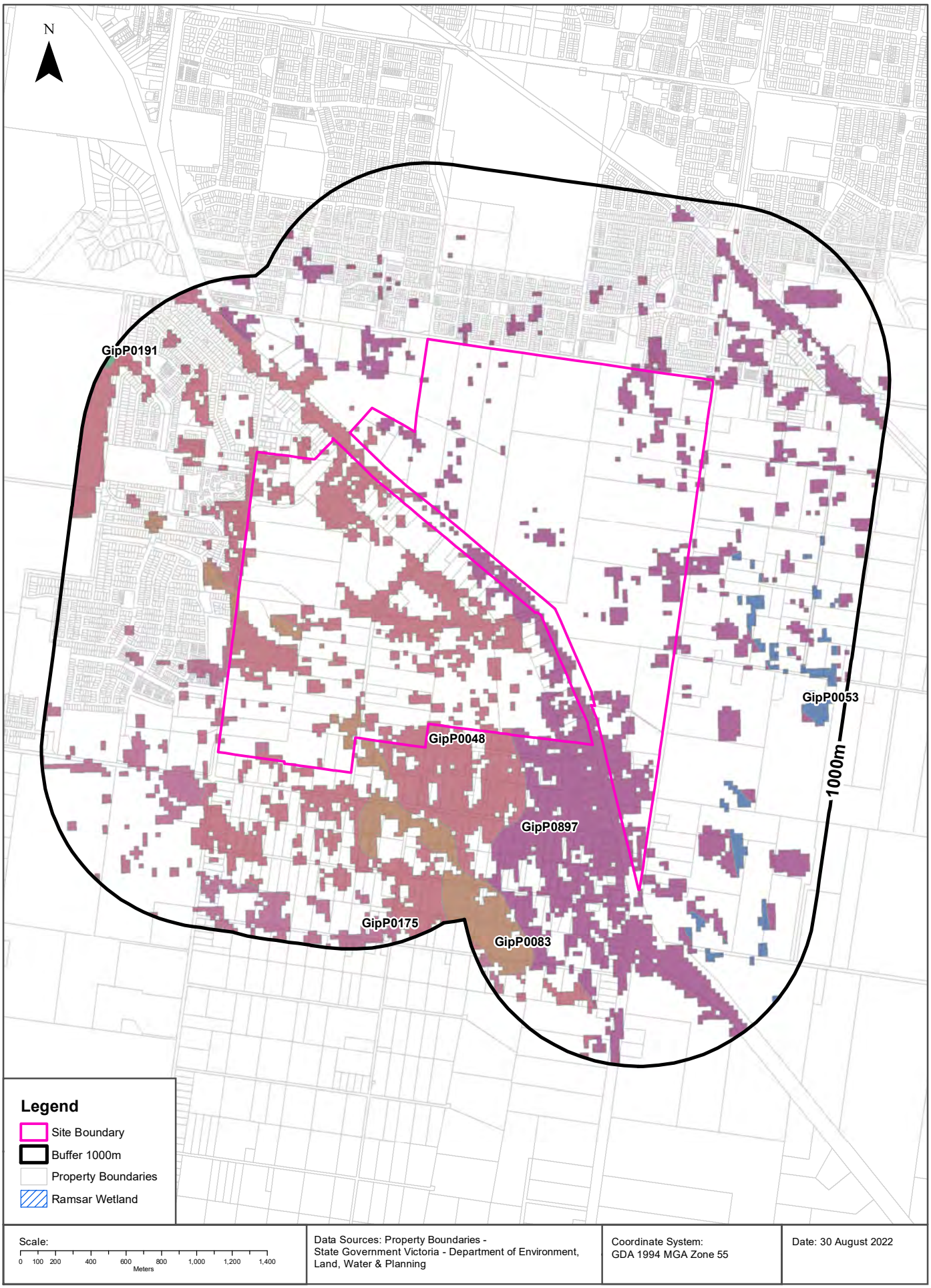
Victorian Coastal Inundation Sea Level Rise

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

Description	Distance	Direction
No records in buffer		

Ecological Constraints - Native Vegetation 2005 & Ramsar Wetlands

Devon Road, Cranbourne East, VIC 3977



Ecological Constraints

Devon Road, Cranbourne East, VIC 3977

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	Dist	Dir
GipP0897	Plains Grassland/Plains Grassy Woodland Mosaic	0897	Plains Grasslands and Chenopod Shrublands	Clay soils	Gippsland Plain	Endangered	not applicable	0m	On-site
GipP0083	Swampy Riparian Woodland	0083	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Endangered	Common	0m	On-site
GipP0048	Heathy Woodland	0048	Heathy Woodlands	Dry and/or better drained	Gippsland Plain	Least Concern	Common	0m	On-site
GipP0175	Grassy Woodland	0175	Lower Slopes or Hills Woodlands	Grassy	Gippsland Plain	Endangered	Common	0m	On-site
GipP0053	Swamp Scrub	0053	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Endangered	Common	243m	East
GipP0191	Riparian Scrub	0191	Riparian Scrubs or Swampy Scrubs and Woodlands		Gippsland Plain	Vulnerable	Common	957m	North West

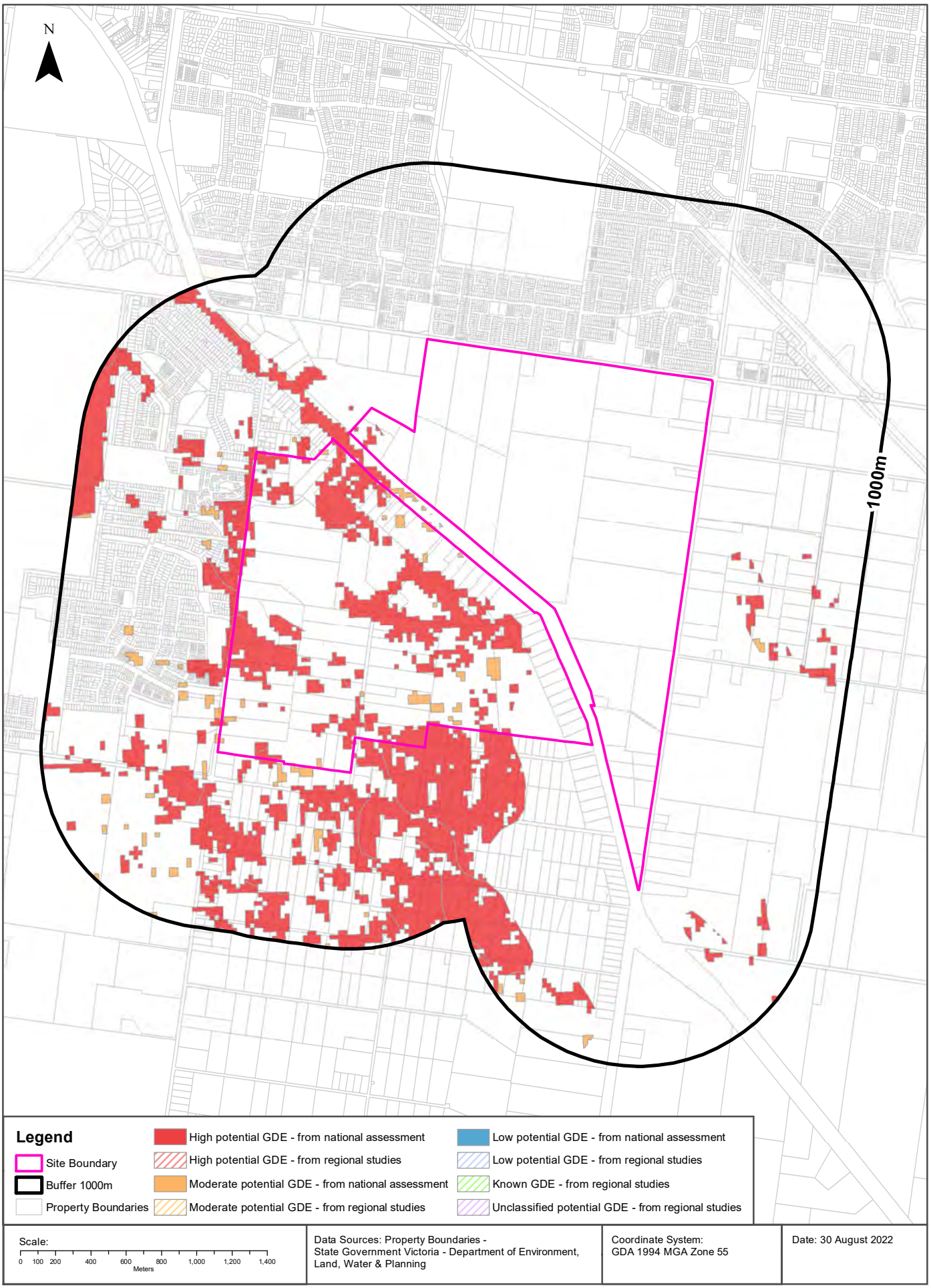
Ramsar Wetlands

What Ramsar wetland areas exist within the dataset buffer?

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

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Devon Road, Cranbourne East, VIC 3977



Ecological Constraints

Devon Road, Cranbourne East, VIC 3977

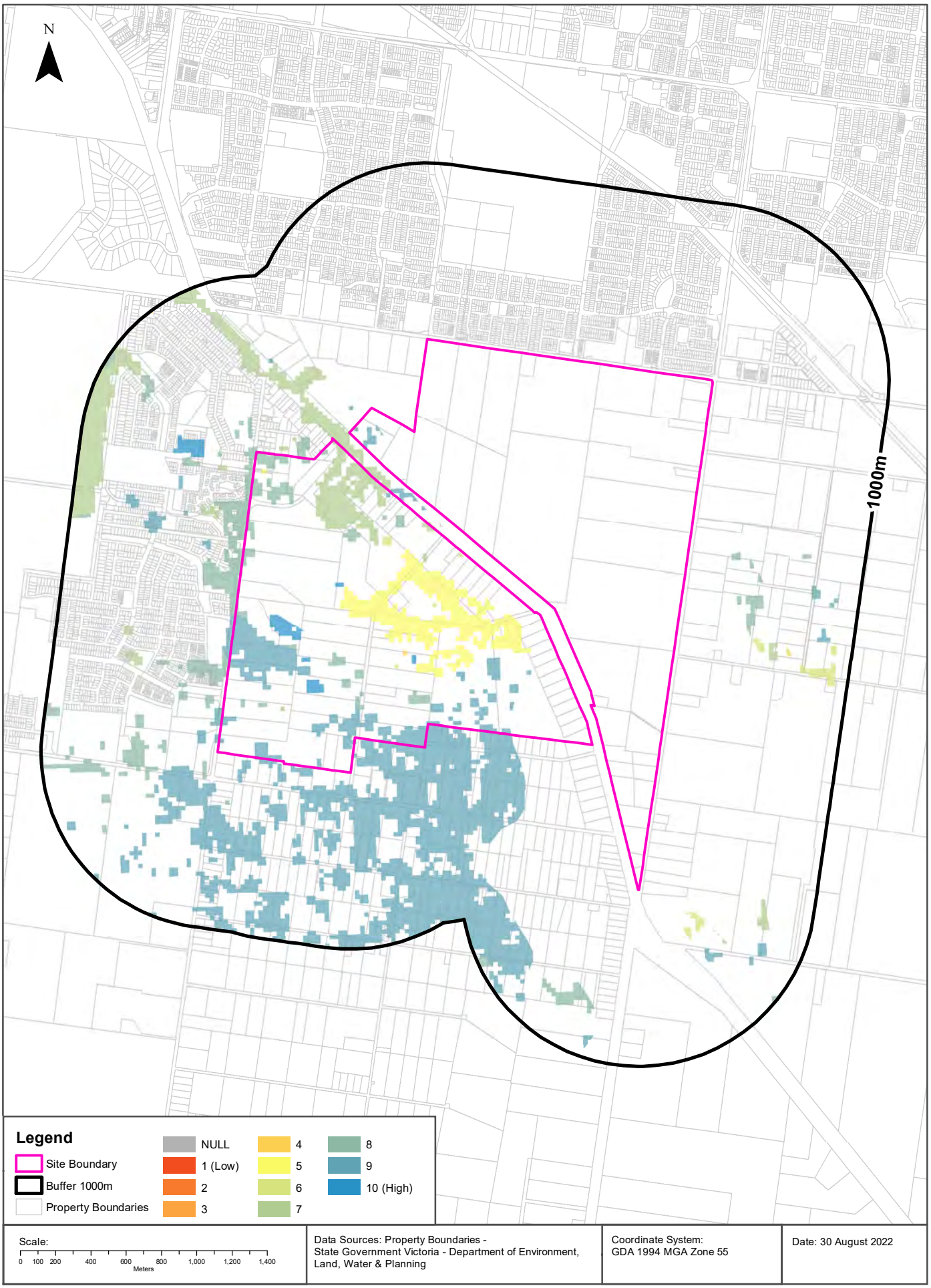
Groundwater Dependent Ecosystems Atlas

Type	Name	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial		Moderate potential GDE - from national assessment	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		Moderate potential GDE - from national assessment	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Fractured rock	0m	On-site
Terrestrial		High potential GDE - from national assessment	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Fractured rock	0m	On-site
Terrestrial		High potential GDE - from national assessment	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology

Inflow Dependent Ecosystems Likelihood

Devon Road, Cranbourne East, VIC 3977



Ecological Constraints

Devon Road, Cranbourne East, VIC 3977

Inflow Dependent Ecosystems Likelihood

Type	Name	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial		8	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		9	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Fractured rock	0m	On-site
Terrestrial		7	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		10	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		9	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		5	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		4	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		6	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		8	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Fractured rock	0m	On-site
Terrestrial		7	Low fault blocks, mainly of tilted and dissected sandstone; granite hills and islands, in two parts either side of Port Phillip Bay.	Vegetation	Fractured rock	483m	West

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 code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

USE OF REPORT - APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report (Terms). The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
      (i) content provided to Lotsearch by third party content suppliers with whom Lotsearch has contractual arrangements or content which is freely available or methodologies licensed to Lotsearch by third parties with whom Lotsearch has contractual arrangements (**Third Party Content Suppliers**); and
      (ii) content which is derived from content described in paragraph (i);
   (b) Neither Lotsearch nor Third Party Content Suppliers takes any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report including any contaminated land assessment or other assessment included as part of a Report;
   (c) the Third Party Content Suppliers do not constitute an exhaustive set of all repositories or sources of information available in relation to the property which is the subject of the Report (**Property**) and accordingly neither Lotsearch nor Third Party Content Suppliers gives any warranty in relation to the accuracy or completeness of the Third Party Content incorporated into the report including any contaminated land assessment or other assessment included as part of a Report;
   (d) Reports are generated at a point in time (as specified by the date/time stamp appearing on the Report) and accordingly the Report is based on the information available at that point in time and Lotsearch is not obliged to undertake any additional reporting to take into consideration any information that may become available between the point in time specified by the date/time stamp and the date on which the Report was provided by Lotsearch to the purchaser of the Report;
   (e) Reports must be used or reproduced in their entirety and End User must not reproduce or make available to other persons only parts of the Report;
   (f) Lotsearch has not undertaken any physical inspection of the property;
   (g) neither Lotsearch nor Third Party Content Suppliers warrants that all land uses or features whether past or current are identified in the Report;
   (h) the Report does not include any information relating to the actual state or condition of the Property;
   (i) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of Land or Property for any particular purpose
   (j) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (k) the End User should undertake its own inspections of the Land or Property to satisfy itself that there are no defects or failures
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
3. Neither Lotsearch (nor any of its officers, employees or agents) nor any of its Third Party Content Suppliers will have any liability to End User or any person to whom End User provides the Report and End User must not represent that Lotsearch or any of its Third Party Content Suppliers accepts liability to any such person or make any other representation to any such person on behalf of Lotsearch or any Third Party Content Supplier.
4. The End User hereby to the maximum extent permitted by law:
   (a) acknowledges that the Lotsearch (nor any of its officers, employees or agents), nor any of its Third Party Content Supplier have any liability to it under or in connection with the

Report or these Terms;

(b) waives any right it may have to claim against Third Party Content Supplier in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms; and

(c) releases each Third Party Content Supplier from any claim it may have otherwise had in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms.

5. The End User acknowledges that any Third Party Supplier shall be entitled to plead the benefits conferred on it under clause 4, despite not being a party to these terms.
6. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
7. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
8. To the extent permitted by law and subject to paragraph 9, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these Terms other than as expressly set out in these Terms are excluded.
9. Subject to paragraph 6, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
10. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
11. Subject to paragraph 9, neither Lotsearch nor the End User is liable to the other for:
    (a) any indirect, incidental, consequential, special or exemplary damages arising out of or in relation to the Report or these Terms; or
    (b) any loss of profit, loss of revenue, loss of interest, loss of data, loss of goodwill or loss of business opportunities, business interruption arising directly or indirectly out of or in relation to the Report or these Terms,

    irrespective of how that liability arises including in contract or tort, liability under indemnity or for any other common law, equitable or statutory cause of action or otherwise.
12. These Terms are subject to New South Wales law.

SMEC

Tower 4, Level 20, 727 Collins Street
Docklands VIC 3008

PO Box 23027, Docklands VIC 8012

Phone: 03 9514 1500

Email: melbourne@smec.com

We're redefining exceptional

Through our specialist expertise, we're challenging boundaries to deliver advanced infrastructure solutions.

www.smec.com