Bacchus Marsh Property Group

124 Hopetoun Park North

Hopetoun Park, VIC

Preliminary Site Investigation

July 2022

Client	Bacchus Marsh Property Group
Project	Preliminary Site Investigation
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1 Introduction

1.1 Background

Edge Group Pty Ltd (Edge) was engaged by Bacchus Marsh Property Group (BMPG) (the Client) to complete a Preliminary Site Investigation (PSI) at:

- 124 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058 (including the Cowans Road escarpment directly west);
- 150 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058;
- 97 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058;
- 189 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058;
- 219 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058;
- 249 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058;
- 259 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; and
- 30 Kyle Lane, Hopetoun Park, Victoria, Victoria 3058 (the Site).

The location of the Site and the surrounding area are presented in ***Figure 1.***

We understand that Hopetoun Park North is a future residential growth area of Bacchus Marsh in the Moorabool Planning Scheme. It is understood that BMPG own approximately 58 ha of the Subject Site (the western side of Hopetoun Park Road). BMPG, on behalf of the entire Subject Site, lodged a rezoning request from Farming Zone to Neighbourhood Residential Zone in September 2021.

As part of that request, BMPG included draft amendment documentation, including a draft Development Plan Overlay schedule, which contained the following future requirement for the consideration of contamination matters:

An environmental assessment prepared by a suitably qualified environmental professional which assesses the potential level and nature of contamination on the land (if any). The assessment must provide clear advice on whether the environmental condition of the land is suitable for the proposed use/s and whether an environmental audit of all, or part, of the land is recommended having regard to the Potentially Contaminated Land General Planning Practice Note 30 July 2021, DELWP, including recommended remediation actions for any contaminated land.

The draft amendment documentation was referred to the EPA and in its response to the referral, the EPA advised that it was not appropriate to defer consideration of contamination matters to later in the planning process as proposed by the draft documents. Accordingly, BMPG has conducted the PSI earlier in the planning process as per the EPA advice. This PSI comprises a Site history review, Site inspection and targeted soil assessment. The data presented in this PSI provides BMPG information on the feasibility of the proposed developments.

1.2 Objectives

The overarching objective of the PSI is to investigate the potential for contamination at the Site due to current and historical activities on and surrounding the Site, specifically to determine:

- Whether there has been potentially contamination land use
- The nature of potential contaminants
- The extent of the contamination
- Remediation requirements, if any
- Recommendations on the need for further assessments.

2 Scope of Work

This PSI was conducted in accordance with the general requirements of the National Environment Protection Council, National Environment Protect (Assessment of Site Contamination) Measure, 1999 (as amended in 2013) (NEPM 2013).

Edge sourced readily available information to develop an understanding of the former activities conducted at the Site and its surrounds. The information has been provided as *Appendix B* – Lotsearch Report. The Site history review conducted by Edge includes:

- Review title records provided by BMPG to identify registered proprietors of the Site and current Title Plans pertaining to the various lots within the Site.
- Appraisal of Site geology and hydrogeology including a review of geological, hydrogeological and topographical maps.
- Review of historical aerial photographs and maps.
- Review of EPA Victoria Priority Sites Register to assess whether Clean-Up of Pollution Abatement Notices have been issued for the Site or immediately surrounding properties.
- Review of surrounding groundwater quality restricted use zones (GQRUZ).
- Review of the nearest three surrounding completed Environmental Audit reports within 2km radius (if applicable).
- Search of historical/current landfills surrounding the Site.
- Appraisal of Site geology and hydrogeology including a review of geological, hydrogeological and topographical maps.
- Summary of surrounding groundwater bores utilising the Visualising Victoria's Groundwater (VVG) online database portal within 2km.

Following review of the Site history information, site inspections were conducted at accessible areas of the Site 27 April 2022 and 9 June 2022. A program of targeted soil assessment at potentially contaminated areas was conducted on 9 June 2022.

This PSI report details the findings of our investigations and includes relevant supporting information and findings regarding the potential for contamination to be present. Recommendations for further assessment are also presented in this report.

3 Current Site Information

3.1 Site Details

Table 1 summarises the key details defining the Site. Refer to *Figure 1* for Site location, title description and surrounding land uses. All title records for the Site were provided by the Client (see *Appendix D* – Title Documents and Plans).

Table 1 - Site Identification Details

Site Addresses	• 124 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058 (including the Cowans Road escarpment directly west); • 150 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; • 97 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; • 189 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; • 219 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; • 249 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; • 259 Hopetoun Park Road, Hopetoun Park, Victoria, Victoria 3058; and • 30 Kyle Lane, Hopetoun Park, Victoria, Victoria 3058 (the Site).
Registered Owners	• 124 Hopetoun Park Road: Bacchus Marsh Property Group Pty Ltd • Escarpment west of 124 Hopetoun Park Road: Nicholas Stanley Dellios (1/3 ownership) & Dellios Bros Pty Ltd (2/3 ownership) (Grocery and Related Product Merchant Wholesalers) • 150 Hopetoun Park Road: Cain Peter Sidon & Shaye Renee Sidon • 97 Hopetoun Park Road: Terrence Anthony Shea & Mary Ann Shea • 189 Hopetoun Park Road: Rose Misfud & Oreste Misfud • 219 Hopetoun Park Road: Denis John Grieve & Wendy Jane Grieve • 249 Hopetoun Park Road: Anna & Zhao Investment Pty Ltd • 259 Hopetoun Park Road: Australia Infinity Investment Pty Ltd • 30 Kyle Lane: Geoffrey Francis Shea & Susan Patricia Shea
Title Description	• 124 Hopetoun Park Road: Volume 11047 Folio 765 • Escarpment west of 124 Hopetoun Park Road: Volume 07013 Folio 484 • 150 Hopetoun Park Road: Volume 11047 Folio 764 • 97 Hopetoun Park Road: Volume 10580 Folio 163 • 189 Hopetoun Park Road: Volume 09614 Folio 907 • 219 Hopetoun Park Road: Volume 09614 Folio 908 • 249 Hopetoun Park Road: Volume 09614 Folio 909 • 259 Hopetoun Park Road: Volume 09614 Folio 910 • 30 Kyle Lane: Volume 10580 Folio 162
Municipality	Moorabool Shire Council
Site Area	Total: 1.51 km^2 • 124 Hopetoun Park Road: 56.26 ha • Escarpment west of 124 Hopetoun Park Road: ~11.53 ha • 150 Hopetoun Park Road: 2.215 ha • 97 Hopetoun Park Road: 19.22 ha • 189 Hopetoun Park Road: 11.6 ha • 219 Hopetoun Park Road: 11.44 ha • 249 Hopetoun Park Road: 11.45 ha • 259 Hopetoun Park Road: 11.29 ha • 30 Kyle Lane: 19.45 ha
Planning Zone(s)	Farming Zone (FZ) Planning and property reports are presented in *Appendix C* – Planning Property Reports.
Planning Overlays	• Design and Development Overlay – Schedule 2 (DDO2) • Significant Landscape Overlay – Schedule 1 (SLO1) (West of Hopetoun Rd only)

	• Public Acquisition Overlay 1 (PAO1) • Environmental Significance Overlay – Schedule 8 (ES08)
Current Use	• 124 Hopetoun Park Road: Residential / 'hobby' farm. • Escarpment west of 124 Hopetoun Park Road: Vacant land. • 150 Hopetoun Park Road: Residential / 'hobby' farm. • 97 Hopetoun Park Road: Residential / 'hobby' farm. • 189 Hopetoun Park Road: Residential / 'hobby' farm, including horse racing. • 219 Hopetoun Park Road: Residential / 'hobby' farm, including horse training. • 249 Hopetoun Park Road: Residential / 'hobby' farm. • 259 Hopetoun Park Road: Residential / 'hobby' farm. • 30 Kyle Lane: Vacant land.
Surrounding Land Use	North – Farming zone land use. East – Public use zone – service and utility, followed by a rural conservation zone, followed by a green wedge A zone. South – Low density residential zone. West – Farming zone land use. Notable facilities within 1,000 m of the Site include: • Two horse training tracks (and one former track) on 124 (former), 189 and 219 Hopetoun Park Road. • One former excavation site quarry 36m northwest of the Site. • Two playgrounds, the closest being 263m southwest of the Site. • Hopetoun Cemetery, 755m northwest of the Site.

Notes
Property details correct as of 30th August 2021.

3.2 Topography & Drainage

Land elevation at the Site approximately 140 m above the Australian Height Datum (mAHD). The Site and surrounding areas are generally flat and slope gently down from north to south. Steep escarpments are present along the eastern and western boundary of the Site.

Based on the observed local topography, surface water runoff at the Site is expected to be directed towards the south, or east/west in the proximity of the escarpments. Surface runoff at the site ultimately flows towards the Werribee River, which itself flows into Melton Reservoir.

3.3 Geology

The western portion of the Site is underlain by the Darley Gravel, which consists of red pale coloured gravel, sand and silt. The eastern portion of the Site is primarily underlain by the Newer Volcanic Group (basalt and basaltic clays). The geology changes across the eastern escarpment from basalt to sandstone, including Riddell Sandstone, conglomerate and sandstone and generic colluvium (gravel, sand and silt).

The Atlas of Australian Soils identifies the soil at the Site as Chromosol (Oa2). These soils consist of hard alkaline red soils and cracking clays.

3.4 Hydrogeology

The hydrogeology of the Site in its regional setting has been ascertained from the following references:

- Visualising Victoria's Groundwater (VVG) online database;
- Groundwater Resource Report – DELWP, 2019 (*Appendix E* – Groundwater Resource Report); and
- LotSearch Report (*Appendix B* – Lotsearch Report), 22 April 2022 (Reference: LS031410 EP).

A summary of the findings is presented in *Table 2.*

Table 2 - Desktop Hydrogeological Review

<table>
<tr><td>Aquifer(s)</td><td>The principal aquifers at the Site are:
QA Quaternary Aquifer: Sand, gravels, clay, silts. Approximate depth 0-20 mbgl
Upper Tertiary / Quaternary Basalt. Approximately 20-30 mbgl.
Lower Tertiary Aquifer: Sand, gravel, clay, silt, minor coal. Approximately 20-60 mbgl.
Mesozoic and Palaeozoic Bedrock (basement): Sandstone, siltstone, mudstone, shale. Approximate Depth 60-260 mbgl</td></tr>
<tr><td>Depth to Upper Groundwater Aquifer</td><td>77% of the Site: 10 – 50 mbgl
93% of the Site: 5 – 50 mbgl</td></tr>
<tr><td>Flow Direction</td><td>Inferred upper aquifer groundwater flow to the east, south and west towards Werribee River, as per local topography.</td></tr>
<tr><td>Groundwater Quality</td><td>Groundwater in the area of the Site is expected to have a salinity in the range of 3,501-13,000 mg/L TDS. This falls within Segment C of the State Environmental Reference Standard (EPA, 2021).</td></tr>
<tr><td>Protected Beneficial Uses of Groundwater (Segments A2) (EPA, 2021)</td><td>Water dependent ecosystems
Potable mineral water supply
Agriculture and Irrigation (stock watering)
Industrial and commercial
Water-based recreation (primary contact recreation)
Traditional owner cultural values
Cultural and spiritual values
Buildings and structures
Geothermal properties.</td></tr>
<tr><td>Nearby Registered Groundwater Bores</td><td>The Department of Environment and Primary Industries' Water Measurement Information System, and 'Earth Resources Database' provided borehole data for 35 bores within a 2 km radius of the Site. The search indicated the groundwater bores are predominantly used for non-extractive use. The groundwater data information is presented in the LotSearch Report Appendix B – Lotsearch Report.

A summary of the key information for the bores within 2 km is provided below.
<table>
<tr><th>Bore Use</th><th>No. of Bores</th><th>Nearest Bore</th><th>Details</th></tr>
<tr><td>Domestic / Stock / Irrigation (extraction)</td><td>8</td><td>798 m north west (ID: WRK985512)</td><td>1 – 2 mbgl: Sandy topsoil
2 – 5 mbgl: Silty clay
6 – 10 mbgl: Heavy gravels
10 – 11 mbgl: Silty clay
11 – 15 mbgl: Sands & Gravels
3 – 15 mbgl Casing</td></tr>
<tr><td>Investigation</td><td>4</td><td>1536 m west (ID: 146754)</td><td>0 – 5.5 mbgl: Clay / Silt, orange/red/brown
5.5 – 6.5 mbgl: Gravel and river rocks
0 – 1.5 mbgl Casing
1.5 – 6.5 mbgl: Screen</td></tr>
<tr><td>Observation/ Unknown/ Unspecified/ Non Groundwater</td><td>23</td><td>711 m north east (ID: 60484)</td><td>No data available.</td></tr>
</table></td></tr>
<tr><td>Groundwater Quality Restriction Zones</td><td>EPA Victoria regulates the restriction of groundwater use when groundwater beneath a property is contaminated via the implementation of groundwater quality restricted use zones (GQRUZ).
There are currently no properties within 1 km of the Site with a GQRUZ.</td></tr>
</table>

3.5 Site Inspection

Site inspections were conducted on accessible sites on 28 April 2022 and 9 June 2022. Photographs taken during the site inspection are provided in *Appendix H* – Site Photos. The following key observations were made during the Site inspection:

124 Hopetoun Park Road (28/04/2022 & 9 June 2022):

- The land was noted to be used as grazing farmland, with a small number of livestock observed.
- The buildings and adjoining sheds on the Site were noted to be relatively old compared to others at the Site. While it was not possible to inspect these buildings due to the tenant being present, it was noted:
    - The sheds were constructed on bare earth i.e. without fixed flooring.
    - The sheds appear currently to be used to be used for vehicle parking and general domestic storage purposes.
    - Some automotive products and paints were observed in small quantities (i.e. generally 4 litres or smaller). No evidence of spills or releases were noted.
    - Given their apparent age, there is potential for the house and associated structures to include asbestos containing materials[1].
- A former horse training track was observed, with remnants noted around the perimeter of bluestone gravels and small glass pieces.
- The same bluestone gravels and glass pieces fill material was noted to exist on the roads and hay storage area on the Site.
- A few soil stockpiles were noted on Site. These were inspected and considered to comprise natural soils from the Site, with no odour, staining or signs of anthropogenic contamination present.
- A collection of waste was noted in the centre of the Site (by the hay storage area), consisting of tyre stockpiles, wooden pallets, steel, concrete pipe, three 1000 litre IBCs and other waste. No evidence of leakage or obvious signs of contamination (e.g. odour or staining) were noted.

Escarpment west of 124 Hopetoun Park Road (28/04/2022):

- This land was vacant with no indicators of prior use that could result in contamination.
- Evidence of vegetation burning was noted.

150 Hopetoun Park Road (inspection conducted from the perimeter on 09/06/2022):

- Although access was not granted by the residents of this site, due to the small portion of the property proposed for development located by the perimeter of the Site, Edge were able to conduct a sufficient site inspection from the perimeter of the site (within 124 Hopetoun Park Road property).
- This property was identified to be a residential hobby farm, with key features including horse stables, a vegetable patch, a shed on a slab and water tanks on the property.
- The buildings and water tanks were observed to be in good condition.
- No signs of contamination were identified.

97 and 219 Hopetoun Park Road:

- Access was not granted by the residents of these sites, and therefore a thorough site inspection was not possible at these Sites.
- Edge notes that from the age and size of these Sites, it is unlikely that commercial farming would have occurred, and limited site contamination would be likely.

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[1] This PSI does not constitute an asbestos or hazardous materials audit. A hazardous building materials assessment (including asbestos) in accordance with Work Health and Safety Act 2011 and Safe Work Australia Model Code of Practise (2020) should be undertaken prior to the demolition of the existing buildings and structures at the Site.

- A horse training track on 219 Hopetoun Park Road was observed.

249 Hopetoun Park Road (28/04/2022):

- Edge was able to discuss this property's conditions with the current tenant, who advised that they were planning to use the land for alpaca breeding and shearing.
- Approximately 50m^3 of small stockpiles were observed at the northern boundary of the Site. It is noted that the stockpiles appeared as mostly natural material, however some minimal concrete aggregate and plastic were observed in the piles. Discussions with the new tenant at the property indicated no information about the origin of the stockpiles.
- Some brick and concrete aggregate were noted around the vicinity of the dam.
- Waste including an old boat, trailer, oil filters, old furniture, etc. were noted scattered around the property.
- The site shed was inspected at the property, and it was noted that the ground was paved.
- A vehicle inspection trench was noted in the site shed, and it was observed to be filled with water at the time of the inspection, indicating that the base of the trench was likely to be paved (therefore limited potential for soil contamination).

259 Hopetoun Park Road (28/04/2022):

- This property appeared to be predominantly residential use, with no evidence of commercial farming.
- A vegie patch garden and chicken coup were noted on the property.
- A concrete slab with some oil staining was observed.
- No signs of contamination were identified.

30 Kyle Lane (28/04/2022):

- This land was vacant with no evidence of commercial farming potential.
- A small stockpile of approximately 5m^3 was observed of recycled road base / bluestone gravels /crushed rock was noted towards the east of the Site, appearing to be the same material used for the road on the property.
- A stockpile was noted by the dam. This was inspected and determined to be representative of the natural soils, with no signs of odour, staining or anthropogenic contamination present.
- A Telstra pole was noted on the Site, and was being serviced during the time of the site inspection.

189 Hopetoun Park Road (09/06/2022):

- This property was identified to be a residential hobby farm, with key features including horse stables and a training track, a shed on a slab and a septic tank on the property.
- No signs of contamination or significant potential contamination sources were identified.

4 Site History

4.1 Review of LotSearch Report (LS031410 EP)

The following LotSearch report was requested by Edge and issued for the Site, to provide details in relation to current and historical land uses at the Site and its surroundings.

- LotSearch (2022), 124 Hopetoun Park, Hopetoun Park, VIC 3188. (Reference: LS031410 EP).

A summary of the Site history information from the LotSearch records are summarised in *Table 3* below. The full LotSearch report is provided in *Appendix B* – Lotsearch Report.

Table 3 - LotSearch Records

Register	Register Information	Interpretation
Historical Aerial Photographs	Historical aerial photographs for the Site and immediate surrounds from 1946 to 2021, to provide information pertaining to historical land uses and structures present at the Site.	Review of aerial photographs from 1946 to 2021 showed: • In 1946, the Site and surrounding area is predominantly vacant/farming land. The Site boundary appears to be a part of a larger farming site. The current day buildings on 124 Hopetoun Park Road are present. Some livestock and evidence of cropping patterns appear to be present on 124 Hopetoun Park Road. • In 1951, the Site and surrounding area is mostly unchanged apart from two new small sheds visible on 189 and 219 Hopetoun Park Road land, and a reduction in vegetation (trees) within the Site. The land to the west and northwest of the Site appear to be used as market gardens. • In 1961, the Site is mostly unchanged apart from the two sheds noted in the 1951 photograph which are no longer visible. No livestock are obviously visible. • In 1975 a new shed in the northeast corner of 124 Hopetoun Park Road is visible. A new dam is also visible on the western side of 189 Hopetoun Park Road. A grid of what appears to be haybales is visible in the south-eastern portion of 124 Hopetoun Park Road. • In 1978, the site remains mostly unchanged. A new shed is visible in the eastern boundary of 219 Hopetoun Park Road. • In 1985, four stockpiles are visible on 124 Hopetoun Park Road premises. The house at 97 Hopetoun Park Road is now present. The shed at 219 Hopetoun Park Road is no longer present. • In 1990, some of the houses and infrastructure from the current day 189, 219 and 249 Hopetoun Park Road is now present. The horse training track at 219 Hopetoun Park Road is visible. A stockpile is located at the northern boundary of 124 Hopetoun Park Road. Quarry activities are visible north of the Site (above 124 Hopetoun Park Road). • In 2006, the house/infrastructure from the current day 150 and 259 Hopetoun Park Road are present. Two additional horse training tracks are visible, at 124 and 189 Hopetoun Park Road. A stockpile by the dam in 30 Kyle Lane is present. • In 2010, the shed in the north-eastern corner of 124 Hopetoun Park Road is no longer present. • In 2014, the hay storage cover is visible in 124 Hopetoun Park Road. Some infrastructure is visible leading up to the dam in the centre of 124 Hopetoun Park Road. Western Freeway is completed and the quarry north-west of the Site has been filled. • In 2017, several small stockpiles at the north of 249 Hopetoun Park Road are visible.

Register	Register Information	Interpretation
		• In 2021, the training track at 189 Hopetoun Park Road has been resurfaced, and the one at 124 Hopetoun Park Road has been removed. The infrastructure is visible leading up to the dam in the centre of 124 Hopetoun Park Road has been removed.
EPA Records	Review of EPA priority sites, licensed premises and works approvals.	The Site is not currently on the EPA Priority Sites Register. No EPA licensed activities or works approvals were noted in the search radius (1km).
Waste Management Facilities & Landfills	Review of waste management facilities.	No former waste management facilities were indicated within the search radius (1 km).
Prescribed Industrial Waste	Review of EPA Prescribed Industrial Waste treaters, disposers and permitted transporters	Six EPA Prescribed Industrial Waste treaters, disposers and permitted transporters were indicated within the search radius (1km). It is noted that four of the six sites are current, and the other two are former, and all six sites only undertook waste transport and no treatment or disposal. The closest site was 357 m south of the Site (Wolf (VIC) Pty Ltd at 16 Carberry Drive, Hopetoun Park). Further details are available in *Appendix B* – Lotsearch Report.
PFAS Investigations	Review of EPA, Defence and Air service Investigations.	No PFAS investigations were present at or in the vicinity of the Site based on EPA, Defence and Airservices Investigations.
EPA Environmental Audits & GQRUZ	Review of environmental audits.	No Environmental Audits or Groundwater Quality Restricted Use Zones (GQRUZ) have been noted within the search radius (1km).
Former Gasworks	Review of former gasworks sites within 1 km of the Site.	No gasworks sites were listed in the vicinity of the Site (1km).
National Liquid Fuel Facilities	Review of National Liquid Fuel Facilities (e.g. petroleum service stations) within 1km of the Site.	No liquid fuel facilities sites were listed in the vicinity of the Site (1km).
Historical Maps & Melway Street Directory	Historical maps from 1916 onward were reviewed.	The Site is listed as vacant/farming land from 1916 to 2009. One shed/house is noted on the eastern portion of the Site in 1916 and 1938.
Title Search	Review of Registered Proprietors at the Site.	The Title search provided the following historical information. Site Features and Parts are displayed in *Figure 2.* Regarding **124 Hopetoun Park Road**: • 12/11/2007: Fraser Property Investments Pty Ltd • 08/01/2008: Sub-division occurred into two lots (150 Hopetoun Park Road) • 03/08/2017: Bacchus Marsh Property Group Pty Ltd Regarding **150 Hopetoun Park Road:** • 12/11/2007: Owned as part of 124 Hopetoun Park Road by Fraser Property Investments Pty Ltd • 08/01/2008: Sub-division occurred • 14/08/2017: Cain Peter Sidon & Shaye Renee Sidon Regarding **Escarpment west of 124 Hopetoun Park Road**: • 10/11/1986: Dellios Bros Pty Ltd (Grocery and Related Product Merchant Wholesalers) • 30/12/1996: Nicholas Stanley Dellios (1/3 ownership) & Dellios Bros Pty Ltd (2/3 ownership)

Register	Register Information	Interpretation
		Regarding **97 Hopetoun Park Road:** • 23/05/2001: Terrence Anthony Shea & Mary Ann Shea • 18/11/2009: Sub-division occurred Regarding **189 Hopetoun Park Road:** • 14/06/1985: Subdivision occurred for 189, 219, 249 & 259 Hopetoun Park Road. • 01/05/2019: Rose Misfud & Oreste Misfud Regarding **219 Hopetoun Park Road:** • 14/06/1985: Subdivision occurred for 189, 219, 249 & 259 Hopetoun Park Road. • 19/12/2000: Denis John Grieve & Wendy Jane Grieve Regarding **249 Hopetoun Park Road:** • 14/06/1985: Subdivision occurred for 189, 219, 249 & 259 Hopetoun Park Road. • 29/05/2018: Anna & Zhao Investment Pty Ltd Regarding **259 Hopetoun Park Road:** • 14/06/1985: Subdivision occurred for 189, 219, 249 & 259 Hopetoun Park Road. • 16/10/2019: Australia Infinity Investment Pty Ltd Regarding **30 Kyle Lane:** • 04/04/2001: Geoffrey Francis Shea & Susan Patricia Shea • 18/11/2009: Sub-division occurred Title and plan records are presented in ***Appendix D*** – Title Documents and Plans.
Historical Business Directories	UBD Business to Business Directories from 1896 - 1991 were reviewed for information on former sites.	No Sites were listed in the UBD Business to Business Directories in the search radius (1km).
Historical Mining Activities	Review of mine shaft locations.	A sandstone quarry was identified approximately 235m north of the Site.
Acid Sulfate Soils	Review of Atlas of Australian Acid Sulfate Soils.	The soil at the Site is classified Class C, described as an extremely low probability of occurrence (1 - 5% chance of occurrence).
Heritage Listings	Listings from the Commonwealth, National and Victorian Heritage registers were reviewed.	No on-Site heritage listings.
Cultural Heritage Sensitivity	Review of Cultural Heritage Sensitivity as specified in Division 3 or Part 2 in the Victorian Aboriginal Heritage Regulations 2018, within 1 km of the Site.	Five Areas of Cultural Heritage Sensitivity were identified on the Site, as specified in Division 3 of Part 2 in the Victorian Aboriginal Heritage Regulations 2018. These areas were identified within along the eastern and western boundaries of the Site. Further details are available in ***Appendix B*** – Lotsearch Report.
Natural Hazards	Review of bushfire prone areas, fire history, flood (1 in 100-year flood event) and Victorian Coastal Inundation Sea Level Rise.	The Site is located in a Designated Bushfire Prone Area and a 100-year flood outline. No records of Victorian Coastal Inundation Sea Level Rise were identified in the search radius (1km). Further details are available in ***Appendix B*** – Lotsearch Report.

Register	Register Information	Interpretation
Ecological Constraints	Review of native vegetation, RAMSAR Wetlands, groundwater dependant ecosystems (GDEs) and inflow dependent ecosystems (IDEs).	Several native vegetation exist on the Site and within 1km of the Site. Groundwater and Inflow dependent ecosystems both exist along the western and eastern boundaries of the Site (in close proximity of the Werribee River). No RAMSAR Wetlands exist within 1 km of the Site.

4.2 Desktop Review and Site Inspection Summary

Entire Site:

Desktop review findings indicate the Site was historically and currently used for farming purposes. Although the current use of the Site appears to be rural residential 'hobby' farms, larger scale commercial farming activities would have occurred historically. With respect to the grazing land use, it is noted that the intensive use of herbicides and pesticides on the Site is considered unlikely given it is expected pastures would have been used primarily for livestock.

124 Hopetoun Park Road:

- The shed and house on this property dates back to before 1946, and at this time it appears all of the current day properties are a part of one larger farm in this time. Therefore, due to the age of the shed, it is likely that the shed was utilised for any large-scale commercial farming that may have historically occurred and therefore have given rise to contamination.
    - Potentially contamination activities that may be associated with large scale commercial use of this shed include:
        - Storage and use of fuels, lubricants and automotive products (i.e. for farming machinery)
        - Automotive repair (i.e. for farming machinery)
        - Agricultural chemical storage (e.g. pesticides)
        - Fertiliser storage
- Furthermore, a former horse training track was observed on this Site, with remnants noted around the perimeter of bluestone gravels and small glass pieces (see *Appendix H* – Site Photos). indicating fill material had been used at the Site

30 Kyle Lane:

- A small stockpile of approximately 5m^3 was observed of recycled road base / bluestone gravels /crushed rock was noted towards the east of the Site, appearing to be the same material used for the road on the property.

249 Hopetoun Park Road:

- Approximately 50m^3 of small stockpiles were observed at the northern boundary of the Site. It is noted that the stockpiles appeared as mostly natural material, however some minimal concrete aggregate and plastic were observed in the piles (indicating the potential for the material to be fill material / introduced from other Sites). Discussions with the new tenant at the property indicated no information about the origin of the stockpiles.

Contamination associated with the aforementioned activities/stockpiles may result in elevated concentrations of herbicides, pesticides, insecticides, metals, total recoverable hydrocarbons (TRH), BTEXN (benzene, toluene, ethylbenzene, xylene, naphthalene), phenols, polycyclic aromatic hydrocarbons (PAH), volatile organic compounds (VOCs) and solvents at the Site.

Furthermore, due to the age of several of the buildings on the properties, there is potential for asbestos containing materials (ACM) to exist within the building materials.

The desktop review did not identify any off-site sources of contamination that could impact the proposed future residential use of Site.

5 Preliminary Conceptual Site Model

A preliminary Conceptual Site Model (CSM) has been developed based on a source–exposure pathway–receptor methodology. This relationship allows an assessment of potential environmental risk to be determined in accordance with NEPM 2013 requirements.

The CSM is based on information and data gathered as part of the desktop investigation and Site inspection.

In accordance with NEPM 2013 guidance the CSM has considered the following elements:

- **Source:** a substance with the potential to cause unacceptable risk to human and/or environmental health.
- **Pathway:** a mode or route by which the substance/source can migrate to a receptor.
- **Receptor:** someone and/or something that could be adversely affected by the substance/source.

Where one of these elements is absent, a complete pathway is not present and on this basis there is unlikely to be an unacceptable risk to human health and/or to the broader environment. Where all of these elements are present a complete or potentially complete exposure pathway exists. In such cases the risk to human health and/or the environment may require further investigation and possibly management.

Potential pollutant linkages for human health and environmental receptors are summarised in *Table 4*, in addition to the contaminants of potential concern (CoPCs).

Table 4 –CSM Summary

Potential Contamination Source	Contaminants of potential concern (CoPCs)	Potential Migration & Exposure Pathway	Potential Receptors
On-Site Sources			
Historical farming practises including fuel storage, automotive repair, agricultural chemical storage and fertiliser storage.	• Hydrocarbons • BTEXN • Pesticides • Herbicides • Heavy metals • Phenols • Solvents • PCBs	• Human exposure to contaminated soil through dermal contact, ingestion or dust inhalation. • Leaching of contaminants resulting in impacts to groundwater. • Vapour exposure pathway for volatile organic compounds (e.g. fuels and solvents). • Uptake by sensitive flora and vegetation. • Ingestion be sensitive flora.	On-site: • Construction workers involved in future redevelopment. • Current and future residents • Terrestrial ecosystems (flora and fauna) Off-site: • Groundwater users. • Aquatic ecosystems at points of groundwater discharge to surface water.
Imported fill material	• Hydrocarbons • BTEXN • Pesticides • Herbicides • Heavy metals • Phenols • PCBs • Asbestos	• Exposure to contaminated soil through dermal contact, ingestion or inhalation. • Leaching of contaminants resulting in impacts to groundwater.	On-site: • Construction workers involved in future redevelopment. • Current and future residents • Terrestrial ecosystems (flora and fauna)

Potential Contamination Source	Contaminants of potential concern (CoPCs)	Potential Migration & Exposure Pathway	Potential Receptors
		• Uptake by sensitive flora and vegetation. • Ingestion be sensitive flora.	Off-site: • Groundwater users. • Aquatic ecosystems at points of groundwater discharge to surface water.

6 Potential for Contamination

Edge conducted site inspections of accessible properties on 27 April 2022 and 09 June 2022 and identified medium and high potential for contamination in some of the properties, as detailed below.

Medium Potential for Contamination activities, as defined in the DELWP 2021 Planning Practice Note were observed:

- Presence of imported fill –Imported fill was observed at the former horse training track at the 124 Hopetoun Road property, and at the hay shed southwest of the former horse training track at 124 Hopetoun Road. Additionally, several small stockpiles containing approximately 50m^3 of soil with concrete aggregate rubble at the 249 Hopetoun Road property, and an approximate 5m^3 stockpile of what appeared to be recycled road base with bluestone crushed rock at the 30 Kyle Lane property.

High Potential for Contamination activities, as defined by the DELWP 2021 Planning Practice Note, may be associated with shed adjacent to the residential house at 124 Hopetoun Road. Historic aerial photos show the sheds date back to earlier than 1946, so which is likely to have been associated with broad-acre commercial farming, and on this basis may have been used for High Potential for Contamination activities such as:

- Fuel storage (i.e. for farming machinery)
- Automotive repair (i.e. for farming machinery)
- Agricultural chemical storage (e.g. pesticides)
- Fertiliser storage

In consideration of the results of targeted soil testing, as discussed in *Section 8*, the contamination potential rankings listed above have subsequently been down-graded to low.

6.1 Recommended Level of Assessment

The Victorian Government, *Ministerial Direction No.1*, 1987 document outlines the requirement that an environmental audit must be conducted on potentially contaminated land which is designated for a sensitive use, to determine the suitability of the property.

The environmental audit system is legislated under the *Environment Protection Act 2017*, and provides for the appointment of environmental auditors by EPA, and a system of preliminary risk screen assessments (PRSA) and environmental audits, which may be used to inform land use planning for potentially contaminated land.

The Department of Environment Land Water and Planning (DELWP) released the *Potentially Contaminated Land – Planning Practice Note 30 (DELWP 2021 Planning Practice Note)* in July 2021 and gives advice on the identification of contaminated land and the appropriate level of assessment of contamination for planning, and circumstances where an EAO should be applied.

The potential for contamination (PfC) rating assigned to the Site was assessed in line with Table 2 and Tables 3 of the DELWP 2021 practice note to assess the appropriate level of assessment for the property in light of the current and historical uses. Table 3 from the DELWP 2021 practice note has been reproduced in this report as *Table 5* for reference.

Table 5 – Recommended Approach to Assessing Potentially Contaminated Land

Proposed Land Use	Potential For Contamination (PfC)	
	High	Medium
New use or buildings and works associated with a new use		
Sensitive uses: Residential use, childcare centre, kindergarten, pre-school centre, primary school, even if ancillary to another use.	A	B
Children's playground		
Secondary School		
Open Space	C	D
Agriculture		
Retail or office		
Industry or warehouse		
Buildings and works associated with an existing use		
Sensitive uses: Residential use, childcare centre, kindergarten, pre-school centre, primary school, even if ancillary to another use.	B	B
Children's playground		
Secondary School		
Open Space	C	D
Agriculture		
Retail or office		
Industry or warehouse		

PfC Assessment Level	Appropriate Level of Assessment
A	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.
C	PSI to inform need for audit is recommended.
D	Planning authority to document consideration of potential for contamination to impact proposal.

Notes
Uses defined in Ministerial Direction No 1, the EAO and clause 13.04-1S Planning Proposal
Tables adapted from DELWP Planning Practice Note 30, July 2021.
Shading indicates the recommended level of assessment

Based on the current and historical information reviewed for the Site, as detailed in ***Section 3*** and ***Section 4*** of this PSI report, and considering land uses in Table 2 of the DELWP 2021 Planning Practice Note, the Site has a Medium or High PfC due to historical potentially contaminating activities and the imported fill material.

Therefore, the recommended level of assessment would be A/B: PRSA or audit option.

A PRSA may be requested from the council to inform the need for an audit. A PRSA can be undertaken to determine the need for an environmental audit. Under section 204 of the Environment Protection Act 2017, the purpose of a PRSA is to:

- assess the likelihood of the presence of contaminated land; and
- determine if an environmental audit is required; and
- if an environmental audit is required, to recommend a scope for the environmental audit.

Instead of proceeding to a PRSA or audit, a targeted soil assessment has been undertaken as part of this PSI to confirm the potential for contamination at the identified high and medium risk areas.

7 Soil Investigation

7.1 Adopted Assessment Criteria

The following section discusses adopted assessment criteria based on the Site's proposed future residential use. Specific criteria are provided in the appended analytical results tables.

The 2021 Environment Reference Standard (ERS) provides a framework for the protection of land and associated Environmental Values in Victoria. The ERS defines land use categories and associated Environmental Values to be protected. Environmental Values of land may be precluded when relevant soil quality objectives set out in the ERS have been exceeded.

The ERS refers to the requirements of the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 2013 as a primary reference document for the protection of Environmental Values of land. The NEPM 2013 details soil investigation criteria as the key objectives for the protection of human health and ecological assessment levels for a range of metals, inorganic and organic compounds, which includes:

- Ecological screening levels (ESLs) for petroleum hydrocarbon compounds.
- Ecological investigation levels (EILs).
- Health screening levels (HSLs) for petroleum hydrocarbon compounds.
- Health investigation levels (HILs).

The investigation / screening levels for the NEPM 2013 as detailed above have been adopted for the purpose of the assessment of contamination in soil. It should be noted that chemical concentrations above the investigation levels would not automatically trigger remedial action, but indicate that further investigation and evaluation of potential risks may be required.

The future residential Site use is considered "Sensitive Use - Other" in accordance with ERS and as such the following Environmental Values of land are protected.

- Maintenance of Ecosystems (Modified and Highly Modified)
- Human Health
- Buildings and Structures
- Aesthetics
- Production of food, flora and fibre.

The protected Environmental Values of land are detailed in *Table 6*.

Preliminary classification of waste soil for possible off-Site disposal was conducted based on categories outlined in EPA Victoria *Waste disposal categories – characteristics and thresholds*, Publication 1828.2, March 2021.

Table 6 – Environment Reference Standard Environmental Values

Environmental Value	Land Use						
			Sensitive Use				
	Parks & Reserves	Agricultural	High Density	Other	Recreation / Open Space	Commercial	Industrial
Maintenance of Ecosystems: *Natural Ecosystems*	✓						
Maintenance of Ecosystems: *Modified Ecosystems*	✓	✓		✓	✓		
Maintenance of Ecosystems: *Highly Modified Ecosystems*		✓	✓	✓	✓	✓	✓
Human Health	✓	✓	✓	✓	✓	✓	✓
Buildings & Structures	✓	✓	✓	✓	✓	✓	✓
Aesthetics	✓		✓	✓	✓	✓	
Production of Food Flora and Fibre	✓	✓		✓			

Note
Grey shading denotes land uses are relevant to the current land use and proposed construction program.

Assessment criteria relevant to protected Environmental Values are summarised in *Table 7*.

Table 7 – Adopted Soil Assessment Criteria

Realised Environmental Value	Soil Quality Objectives
Maintenance of Ecosystems	The adopted ecological assessment criteria principally apply to contaminants in the uppermost 2.0 m of soil in urban environments. The following NEPM 2013 EILs / ESLs have been adopted to assess potential environmental impacts to terrestrial flora and fauna ecosystems: • Generic and site-specific EILs for aged soils, urban residential & public open space • ESLs for fine soils and coarse, urban residential.
Human health	The following criteria have been adopted to assess potential impact to human health: • HIL-A for low density residential, primary schools and childcare centres • HSL-A/B for low-high density residential, sand, silt and clay soils
Buildings and Structures	The ERS states that contamination must not cause the land to be corrosive or adversely affect the integrity of structures or building materials. In accordance with the agreed scope of work, soil testing conducted as part of this Assessment did not include analysis for geotechnical soil properties. A separate geotechnical investigation would be required in planning for future Site development construction.
Aesthetics	There are no quantitative criteria for the assessment of aesthetic impacts; however, the ERS states that contamination must not cause the land to be offensive to the senses of human beings. This is assessed based on visual and olfactory evidence observed during Site investigations.
Production of Food, Flora and Fibre	The assessment criteria adopted for protection of ecosystems are also used to assess for risk to Production of Food Flora and Fibre.

7.2 Sampling Strategy & Methodology

The sampling scope and methodology is summarised in *Table 8*.

Table 8 – Soil Investigation Summary

Assessment	Details
Soil Assessment at 124 Hopetoun Park Road	
Bore Locations	• BH01-BH06: Six (6) locations targeting the fill material remnants identified around the former horse training track and hay storage area • BH07-BH12: Six (6) locations targeting the site shed and nearby area Sample locations are shown on *Figure 3*.
Subsurface Clearance	Drilling locations were cleared of underground services by a qualified contractor using a combination of ground penetrating radar and radio detection scanning methods.
Methodology	Soil bores were drilled using mechanically driven solid augers or by hand auger.
Depth of Investigation	Soil bores were extended to a maximum depth of 1.5 m below ground level (m bgl). All bores were drilled to a sufficient depth to allow the sampling of natural soil.
Sampling Intervals	At each location, soil samples were collected from near-surface (0.1 – 0.2 m), 0.5 m and 1.0 m bgl or termination depth.
Sampling Methodology	Samples were collected directly into sample jars provided by the laboratory and were stored in chilled containers for delivery to the analytical laboratories under Chain of Custody documentation.
Soil Logging	Soil samples were logged by an experienced environmental scientist / engineer. Borelogs are provided in *Appendix F* – Borelogs.
Field Screening	Soil samples were screened in the field for the presence volatile organic compounds (VOC) using a photoioinisation detector (PID).
Equipment Decontamination	Field sampling equipment was decontaminated prior to use at each sampling location to limit the potential for cross-contamination. Decontamination of field equipment involved scrubbing in a detergent solution (i.e. Decon 90®), potable water and finally deionised water.
Reinstatement of Boreholes	All boreholes were reinstated with drill cuttings and made level to ensure no uneven surface or trip hazards result.
Stockpile Assessment & Categorisation at 249 Hopetoun Park Road	
Stockpile Samples	SP01-SP10: 10 representative stockpile samples collected from the near surface of the stockpiles.
Sampling Methodology	Soil samples were collected by hand/shovel from the near surface of the stockpile. Samples were collected directly into sample jars provided by the laboratory and were stored in chilled containers for delivery to the analytical laboratories under Chain of Custody documentation.
Soil Logging	Soil samples will be logged by an experienced environmental scientist / engineer.

7.3 Laboratory Analytical Program

Selected soil samples ranging from the near surface to shallow natural soils were submitted for laboratory analysis of potential contaminants as outlined in *Table 9*.

The primary laboratory analysis was conducted at the ALS Springvale laboratory, which has National Association of Testing Authorities (NATA) accreditation for the analyses performed. NATA-accredited laboratory reports and chain of custody documentation are provided in *Appendix I*.

Table 9 – Soil Laboratory Analytical Schedule

Samples	Analysis
Shed at 124 Hopetoun Park Road	
BH07-0.1, BH09-0.1, BH11-0.1	NEPM HIL Suite with herbicides
BH07-0.1, BH09-0.5	NEPM EIL Soil Classification Suite
BH08-0.1, BH10-0.1	TRH, BTEXN, PAH, OPP, OCP, Heavy metals
BH09-0.5, BH12-0.1	TRH, BTEXN, PAH, Phenols, Heavy metals
BH10-0.5, BH11-0.5, BH12-0.5	TRH, BTEXN, Heavy metals
Horse Training Track at 124 Hopetoun Park Road	
BH01-0.1	NEPM HIL Suite with herbicides
BH02-0.1, BH03-0.1, BH04-0.1, BH05-0.1, BH06-0.1	TRH, BTEXN, PAH, Heavy Metals
BH01-0.5, BH03-0.5, BH05-0.5	NEPM 15 Metals
Stockpiles at 249 Hopetoun Park Road	
SP01	EPA 1828.2 Fill Screen
SP05, SP07, SP09	TRH, BTEXN, PAH, Heavy Metals
SP03	NEPM 15 Metals

Notes
NEPM HIL Suite with herbicides: 15 Metals (S-3), Cr VI, WAD CN, Organics, OCPs, Mirex, Atrazine, Chlorpyrifos, Bifenthrin, TRH/BTEXN PAHs/Phenols, 16 Herbicides incl' 2,4,5-T, 2,4-5, MCPA, P-21/2 MCPB, Mecoprop & Picloram
NEPM EIL Soil Classification: Fe, CEC, pH ($CaCl_2$), TOC, Clay Content
EPA 1828.2 Fill Screen: pH, BTEXN, TRH, phenolics, CHC, halogenated benzenes, cyanide, fluoride, MAH, metals (including CrVI), OCP, PAH, PCB
NEPM 15 Metals Screen: As, B, Ba, Be, Cd, Cr, Co, Cu, Mn, Ni, Pb, Se, V, Zn, Hg
Heavy metals: As, Cd, Cr, Cu, Ni, Pb, Zn, Hg
OCP: Organochlorine pesticides
OPP: Organophosphorus pesticides
BTEXN: benzene, toluene, ethyl benzene, xylenes, naphthalene
TRH: total recoverable hydrocarbons
PAH: Polycyclic aromatic hydrocarbons

7.4 Quality Assurance (QA) / Quality Control (QC)

The methodology conducted as part of this PSI was in accordance with the agreed scope which conforms with standard industry practice and Edge internal standard operating procedures.

As part of the quality control (QC) program, one blind duplicate and interlab duplicate sample, one rinsate blank sample and one trip blank sample were collected and submitted for analysis of key contaminants of potential concern. The collection and analysis of quality control samples provides confidence in the results of a sampling program, and is part of the overall quality assurance (QA) / QC program.

A review of the QA/QC process undertaken as part of the Assessment is presented in *Section 8.4*

8 Soil Results Discussion

8.1 Soil Field Observations

A summary of soil conditions observed during the field works conducted as part of the Assessment are summarised in *Table 10* and borelogs are presented in *Appendix F* – Borelogs.

Table 10 – Summary of Observed Soil Conditions

Sample Location	Typical Depth Interval (mbgl)	Typical Description	Observed PIDs (ppm)
124 Hopetoun Park Road			
Shed	0 – 0.15	FILL: Clayey SILT with gravels, brown, loose.	0.2-0.5
	0.15 – termination depth	CLAY with silt: medium plasticity, reddish brown with some white/pale grey mottling, dry to moist, trace gravels present.	0.2-0.5
Horse Training Track	0 – 0.3	FILL: Sandy CLAY: Greyish/reddish brown, medium grained sand. Dry to moist, loose. With silt, minor rootlets and minor fine basalt crushed rock gravel.	0.1-0.3
	0.3 – 1.0	Silty CLAY: High plasticity, reddish brown, stiff to very stiff. Becoming more yellow with depth.	0.0-0.3
249 Hopetoun Park Road			
Stockpile	-	Clayey, gravelly SILT, brown, dry. Some bluestone crushed rock, quartz, sandstone cobbles, carpet and plastic present.	0.0

Field observations made during the soil sampling program did not identify any obvious indications of soil contamination (i.e. odorous, discoloured or stained soils). The results of PID screening indicate there is low potential for volatile organic compounds (VOC) to be present in the samples collected.

8.2 Soil Analytical Results

Soil analytical results for on-Site retention assessment are presented in *Table A1, Appendix A* and waste soil classification results are presented in *Table A2 Appendix A*. NATA-accredited laboratory reports and chain of custody documentation are provided in *Appendix I.*

8.2.1 On-Site Retention / Suitability for Use

124 Hopetoun Park Road Sheds

All analytes, with the exception of total recoverable hydrocarbons (TRH) >C_{10}, all contaminants were reported at concentrations either below the laboratory limits of reporting (LOR) or below all adopted assessment criteria. *Table 11* provides a summary of contamination reported at concentrations above adopted assessment criteria.

Table 11 – Summary of Soil Contamination - 124 Hopetoun Park Road Sheds

Location	Analyte	Sample / Location	Reported Concentration (mg/kg)	Criteria Exceeded
Within sheds at 124 Hopetoun Park Road	TRH >C_{10}-C_{16} Fraction (F2 minus Naphthalene)	BH09-0.1	420	120 [1] 280 [2]
		BH10-0.1	130	120 [1]
	TRH >C_{16}-C_{34} Fraction (F3)	BH09-0.1	2,880	1,300 [1]
		BH10-0.1	3,320	1,300 [1]

Notes:
1 NEPM Ecological Screening Level (urban residential, fine soil)
2 NEPM Health Screening Level (residential A/B, clay)

The TRH concentrations that exceed adopted criteria were reported in shallow (0.1 m bgl) samples taken from two locations within the sheds. While no obvious impact or staining was observed in the area or during soil sampling, the nature of contaminants and expected historic uses suggest the elevated TRH concentrations are likely to be associated with the use and/or storage of hydrocarbon-based fuels (e.g. diesel) and automotive products (e.g. oils and lubricants). Deeper soil samples from BH09 and BH10 (i.e. BH09-0.5 and BH10-0.5) both reported all TRH fractions at concentrations below laboratory LORs.

NEPM (2013) allows for statistical analysis of soil contamination data to assess the significance of contamination 'hotspots' should such be identified in a contamination asesssment. This includes the following tests:

- The standard deviation of the sample concentrations should not exceed 50% of the environmental quality objective.
- No individual sample concentration should exceed 250% of the environmental quality objective.
- The 95% upper confidence limit (UCL) of the arithmetic mean concentration of the contaminant should be less than the relevant environmental quality objective.

The results of statistical analysis for TRH contamination at the 124 Hopetoun Park Road Sheds area are provided in *Appendix A* and summarised in *Table 12*.

Table 12 - 124 Hopetoun Park Road TRH Contamination Statistical Analysis

Analyte	Criteria Exceeded	Standard Deviation (mg/kg)	250% of Criteria (mg/kg)	95% UCL (mg/kg)
TRH >C_{10}-C_{16} Fraction (F2 minus Naphthalene)	120 [1]	**116.9**	700	**256.2**
	280 [2]	116.9	700	256.2
TRH >C_{16}-C_{34} Fraction (F3)	1,300 [1]	**1,251**	**3,250**	**2,423**

Notes:
1 NEPM Ecological Screening Level (urban residential, fine soil)
2 NEPM Health Screening Level (residential A/B, clay)
Bold type with shading indicates exceedance of NEPM statistical analysis criteria

The results of statistical analysis indicate reported TRH F2 concentrations at the sheds area are unlikely to pose an unacceptable risk to human health under a residential land use scenario.

While statistical data for TRH F2 and TRH F3 exceeded one or more of the NEPM criteria, the general absence of contamination at the sheds area indicates the extent of impact is probably limited and as such the isolated occurrence of elevated TRH are not indicative of a significant risk to ecosystems under the current land use.

124 Hopetoun Park Road Horse Training Track

All soil samples collected from the trotting track located at the 124 Hopetoun Park Road property and submitted for laboratory analysis reported all potential contaminants at concentrations either below laboratory LORs or all adopted assessment criteria. On this basis the results of soil testing at the horse training track indicate a general absence of contamination, and as such the risk to protected environmental values is acceptable.

249 Hopetoun Park Road Stockpiles

All soil samples collected from the stockpiles located at the 249 Hopetoun Park Road property and submitted for laboratory analysis reported all potential contaminants at concentrations either below laboratory LORs or all adopted assessment criteria. On this basis the results of stockpile testing indicate a general absence of contamination, and as such the risk to protected environmental values is acceptable should the material be intended for reuse at the Site.

8.2.2 Waste Categorisation for Off-Site Disposal

Preliminary categorisation for off-Site disposal of soil was conducted through comparison of laboratory results against criteria provided in EPA Publication 1828.2 *Waste disposal categories – characteristics and thresholds* (March 2021). Preliminary categorisation results are as follows:

124 Hopetoun Park Road Sheds

- The elevated TRH concentrations reported at BH09 and BH10 from the shed fall within the range for Category D soil.
- Slightly elevated nickel concentrations were reported in two samples (BH07-0.1, BH12-0.1) from the sheds area. While the reported concentrations fall within the range for Category D soil, reported concentrations may also be representative of background levels.
- An elevated zinc concentration was reported in one sample (BH11-0.1) from the sheds area and falls within the range for Category D soil.
- It is noted the elevated nickel and zinc concentrations reported do not exceed any of the adopted on-site retention criteria.

Further testing of any material excavated from the sheds area and intended from off-Site disposal would be required to confirm the waste category.

124 Hopetoun Park Road Horse Training Track

All samples collected and analysed from the horse training track area at the 124 Hopetoun Park Road property reported potential contaminants at concentrations within the range for Fill Material.

249 Hopetoun Park Road Stockpiles

All samples collected and analysed from the soil stockpiles located at the 249 Hopetoun Park Road property reported potential contaminants at concentrations within the range for Fill Material.

8.3 Potential Contamination Issues

The DELWP Planning Practise Note considers most agricultural land is not likely to be contaminated. However, consideration needs to be given to the potential for impact associated with the following specific contaminating activities:

- Commercial use of pesticides (including herbicides, fungicides etc)
- Biosolids application to land
- Farm waste disposal

The results of the Assessment indicate that, except where otherwise discussed in *Table 13*, current and historic agricultural activities at the Site are unlikely to have resulted in impacts associated with any of the possible specific contaminating activities listed above. On this basis the Contamination Potential is Low. This conclusion is largely based on the identified nature of current and historic agricultural and related activities, (i.e. historic broad-acre grazing and current small-acre rural residential 'hobby' farming), as well as the results of targeted soil testing.

Table 13 discusses contamination sources and potential for each property based on the findings of this Assessment.

Table 13 - Potential Contamination Issues

Site Activity / Potential Sources	Contamination Potential & Comments
124 Hopetoun Park Road, Hopetoun Park	
Site Sheds (potentially associated with historical large scale farming use)	Contamination Potential: Low Limited soil petroleum hydrocarbons contamination was identified at near-surface at two locations within the sheds. The contamination has been vertically delineated at both locations and laterally delineated through soil testing at several nearby locations. The identified soil contamination is likely to be restricted to isolated areas within the sheds and not likely to pose an unacceptable risk to human health or ecosystems under the current land use. The initial high potential for contamination is down-graded to low based on the results of targeted soil testing.
Former horse training track	Contamination Potential: Low Soil testing conducted at the area where the former horse training track was located did not identify elevated concentrations of potential contaminants. Therefore the initial medium potential for contamination classification is down-graded to low.
249 Hopetoun Park Road, Hopetoun Park	
Stockpiles	Contamination Potential: Low Soil testing of the stockpiled material did not identify elevated concentrations of potential contaminants. Therefore the initial medium potential for contamination classification is down-graded to low.
30 Kyle Lane, Hopetoun Park	
Gravel stockpile	Contamination Potential: Low Edge has been informed that the gravel stockpile is no longer present on the Site, and therefore the overall risk of contamination at the site is down-graded to low.

In relation to the properties at 97 Hopetoun Park Road and 219 Hopetoun Park Road which were not accessible for inspections at the time of this Assessment, the DELWP Planning Practise Note classification as Low is based on our current understanding of Site conditions from the desktop review. The Low classification may be reviewed following inspections of those properties.

8.4 Data Quality Review

The following section summaries the key data quality indicators (DQI) used to assess the accuracy, completeness, representativeness, comparability and sensitivity of the soil data, in accordance with NEPM (2013) Schedule B2.

Table 14 – Data Quality Review

Item	Data Quality Evaluation
QC Duplicate Analysis	28 primary soil samples were submitted for laboratory analysis. FD01 and FS01 were sampled as a blind duplicate of BH07-0.1 and submitted for laboratory analysis at the primary laboratory (ALS) and secondary laboratory (Envirolab) respectively.
Soil RPD Results	A relative percentage difference (RPD) was calculated for the FD01 / BH07-0.1 and FS01 / BH07-0.1 duplicate pairs to obtain a quantitative measure of the accuracy of the results obtained. An RPD range of 30% to 50% is generally considered acceptable, as outlined in AS4482.1-2005 and NEPM 2013. The RPD data is provided in ***Table A3, Appendix A.*** The RPD values were calculated using the formula: $RPD\% = \frac{(X_1 - X_2)}{M} \times 100$ Where: X_1 = primary sample result X_2 = duplicate sample result M = mean result of parent and duplicate 5 of the 34 RPD results (i.e. 15%) for chemical analyses exceeded the adopted acceptable range, with a maximum RPD of 93% being reported. The relatively small number of elevated RPD values reflects the inherent chemical heterogeneity of soils and is not considered to represent a significant data quality issue.
Laboratory Limit of Reporting (LOR)	Laboratory LORs were in all cases lower than adopted assessment criteria. On this basis the sensitivity of laboratory analysis is adequate to assess risk to protected Environmental Values and thereby achieve assessment objectives.
Rinsate Blank Analysis	One rinsate blank (RB01) was collected from the field sampling equipment was submitted for laboratory analysis of key potential contaminants. Analytical results for the rinsate blank sample is provided in ***Table A4, Appendix A.*** With the exception of total chromium, all analytes tested were reported at concentrations below laboratory LORs. Total chromium was detected at a concentration of 0.002 mg/L, which is only marginally above the laboratory LOR of 0.001 mg/L and therefore not considered to represent a significant data quality issue. Overall, the results of rinsate blank analysis indicate adequate decontamination procedures were adopted as part the soil sampling program.
Trip Blank Analysis	One trip blank sample (TB01) was submitted for laboratory analysis of volatile contaminants. Analytical results for the trip blank sample is provided in ***Table A4, Appendix A.*** All analytes were reported at concentrations below laboratory LORs. This indicates there is low likelihood of cross-contamination between samples occurring during transit.
Laboratory QA/QC	Laboratory internal QC testing reports are included with the laboratory reports in ***Appendix I*** – Laboratory Chain of Custody and ReportsThe results of laboratory internal QC testing are summarised as follows: **Primary Laboratory:** • No Method Blank value outliers occur. • No Laboratory Control outliers occur.

Item	Data Quality Evaluation
	• No surrogate recovery outliers occur for all regular sample matrices. • No Analysis Holding Time outliers exist. • Internal duplicate outliers exist for analysis of some metals and PAHs. • Matrix spike recovery outliers were reported for herbicides analysis. • Quality Control sample frequency outliers are noted for electrical conductivity and pH soil analysis and for TRH analysis on water samples. • The relatively small number of laboratory internal QC outliers does not constitute a data quality issue of any significance to the findings of the Assessment. Secondary Laboratory: • All laboratory QC data was within the Envirolab Group's specifications.
NATA Endorsement of Laboratory Report	ALS and Envirolab laboratory reports were stamped with the NATA endorsement stamp and signature.
Data Completeness	The data quality review indicates no significant systematic errors in the data collection process and therefore, the data set used as the basis for the report is considered valid and complete.

9 Conclusions and Recommendations

9.1 Conclusions

Edge has completed this Preliminary Site Investigation (PSI) of the following rural residential properties at Hopetoun Park, Victoria, covering approximately 1.51 km^2 and referred to collectively as "The Site":

- 124 Hopetoun Park Road (including the Cowans Road escarpment directly west)
- 150 Hopetoun Park Road
- 97 Hopetoun Park Road
- 189 Hopetoun Park Road
- 219 Hopetoun Park Road
- 249 Hopetoun Park Road
- 259 Hopetoun Park Road
- 30 Kyle Lane (southern portion).

The Site is located within the Hopetoun Park North Precinct Future Residential Growth Area under the Bacchus Marsh Urban Growth Framework.

The overarching objective of the PSI has been to investigate the potential for contamination at the Site due to current and historical activities on and surrounding the Site, specifically to determine:

- Whether there has been potentially contamination land use
- The nature of potential contaminants
- The extent of the contamination
- Remediation requirements (if any)
- Recommendations on the need for further assessments.

The PSI scope of work included an initial Site history review and inspections of accessible properties. Targeted soil testing was conducted in areas where a potential for soil contamination was identified in the initial stages of investigation.

The following conclusions are provided based on investigation results:

- The Site was historically and is currently used for farming and residential purposes. Although the current Site use is essentially rural residential with small-scale 'hobby' farming, larger scale commercial farming activities would have occurred historically.
- The house and adjoining sheds at 124 Hopetoun Park Road date back to pre-1946 and are inferred to have been associated with broader scale farming activities. On this basis, the sheds at this property have the potential for impacts associated with the use and storage of fuels, automotive and agricultural chemicals.
- The sheds at 124 Hopetoun Park Road were subject to targeted soil sampling with laboratory analysis for contaminants of potential concern. While surficial petroleum hydrocarbons impact was identified in some areas, the extent of impact is unlikely to be widespread and not considered to represent a significant risk to protected environmental values under the current land use.
- The former horse training track at 124 Hopetoun Park Road (now largely removed) was subject to targeted soil sampling to assess for contamination potentially associated with fill importation. The results of soil testing indicate that any residual material associated with the former horse training track is not elevated in potential contaminants and would be unlikely to pose a risk to current or future Site users.
- Stockpiled soil located at the northern portion of 249 Hopetoun Park Road, as potentially imported material, has the potential to be contaminated. The stockpile was tested for a broad

range of potential contaminants, none of which were reported at elevated concentrations. On this basis the stockpiled material is considered suitable for reuse at the Site.

The DELWP 2021 Planning Practice Note states that "*If the review of the current and historical use of the land and surrounds shows a history of non-contaminating activities and there is no other evidence or suspicion for contamination, further investigation is not required*". The results of this PSI, in particular the results of targeted soil testing in potentially contaminated areas, indicate **the Site has a low risk of contamination**. On this basis no further investigation is considered necessary in planning for redevelopment of the Site to a sensitive land use.

9.2 Recommendations

In consideration of the findings of the PSI findings, the following recommendations are provided:

- Properties that were not accessible for inspection as part of this PSI should be inspected to confirm the low risk of contamination classification.
- A hazardous building materials assessment (including asbestos) in accordance with Work Health and Safety Act 2011 and Safe Work Australia Model Code of Practise (2020) should be undertaken prior to the demolition of the existing buildings and structures at the Site.
- Any material removed from the Site as part of the proposed development will be required to be categorised in accordance with EPA waste regulations and guidelines.
- Prior to receival on Site, any imported fill should be assessed as Fill Material (EPA Publication 1828.2) and consideration against human health and ecological sensitive land use.

10 Limitations

The findings of this report are based on the Scope of Work outlined in the Edge proposals (Edge Ref.: *20220134-P-01* and *20220134-P-02*). Edge performed the services in a manner consistent with the expected level of care and expertise exercised by those in the environmental profession.

No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal.

Although normal standards of professional practice have been applied, the methodology adopted, and sources of information used by Edge are outlined in this report. Edge has made no independent verification of this information beyond the agreed scope of works and assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to Edge was false.

All conclusions and recommendations made in the report are the professional opinions of the Edge personnel involved with the project and, while normal checking of the accuracy of data has been conducted, Edge assumes no responsibility or liability for errors in data obtained from regulatory agencies or any other external sources, nor from occurrences outside the scope of this project. Edge have not undertaken a site inspection and hence cannot provide certainty on the current site status/setting.

References

Australian Standard (AS) 4482.1-2005, Guide to the Investigation and Sampling of Site with Potentially Contaminated Soil, Part 1: Non-Volatile Substances, 2005 (AS4482.1-2005)

AS 4482.2-1999, Guide to the Investigation and Sampling of Site with Potentially Contaminated Soil, Part 2: Volatile Substances, 2005 (AS4482.2-1999)

Department of Environment, Land, Water & Planning. (2019). *Groundwater Resource Report* [VICGRID94 Easting: 2500645 Northing: 2417373].

Department of Environment, Land, Water & Planning, Potentially Contaminated Land, Planning Practice Note 30, July 2021.

Environment Protection Act 2017, Environmental Reference Standard, No. S 245, May 2021.

Environmental Protection Authority (EPA, 1915), Contaminated land policy, February 2021.

Environmental Protection Authority (EPA, 1940), Contaminated land: Understanding section 35 of the Environment Protection Act 2017, February 2021.

Environment Protection Regulations (EPR) 2021. S.R. No. 47/2021, 25 May 2021.

EPA Victoria (2021) Waste disposal categories – characteristics and thresholds. Publication 1828.2, March 2021.

EPA Victoria (2009) Soil Sampling. Publication 702 (June 2009).

LotSearch. (2022). LotSearch Enviro Professional, 124 Hopetoun Park, Hopetoun Park, VIC 3188, (22 April 2022, Ref: LS031410 EP).

National Environment Protection Council (NEPC), National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1) – Amendment of the National Environment Protection (Assessment of Site Contamination) Measure (NEPM), 1999 (NEPM 2013).

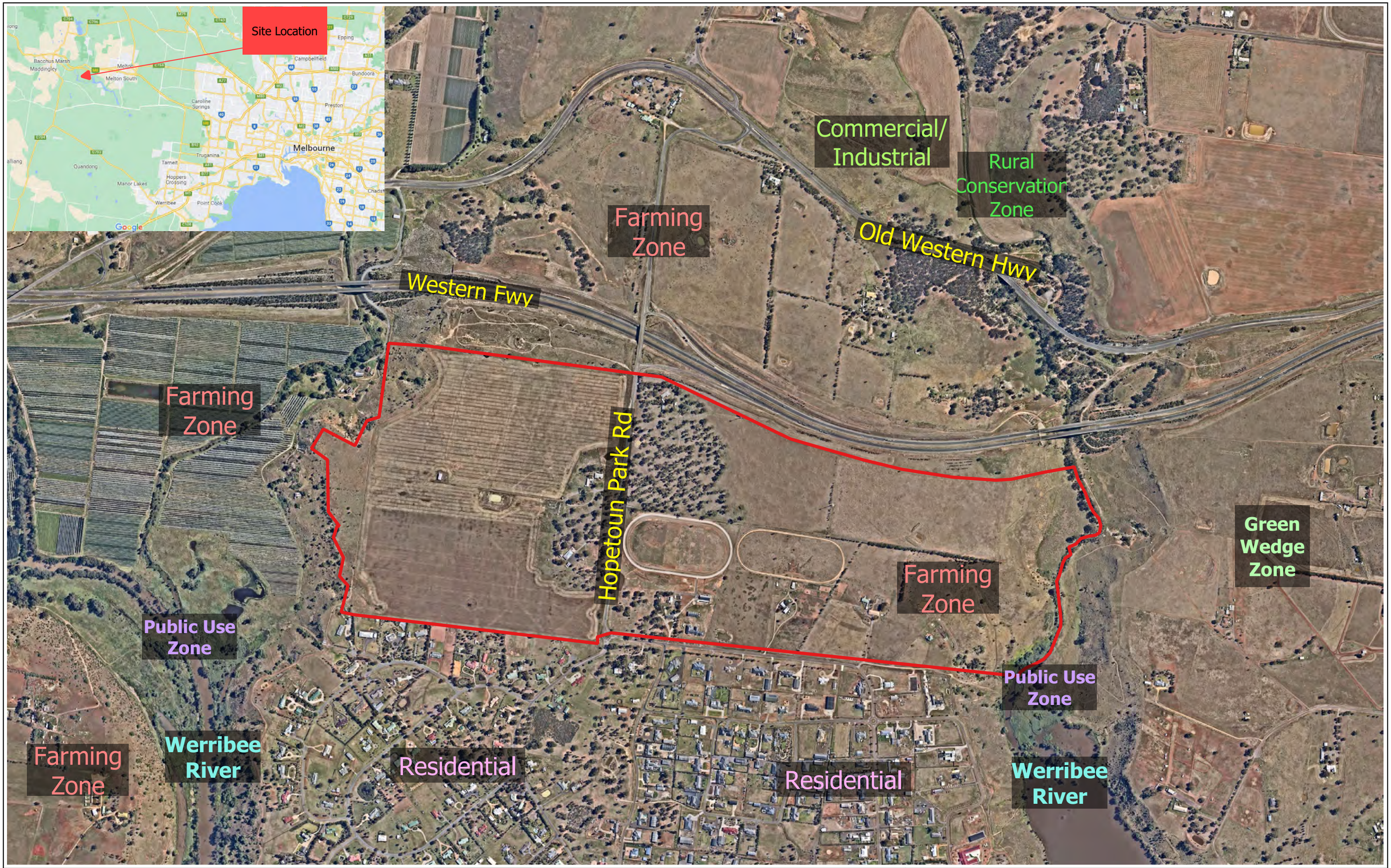
Victorian Government Gazette (2021), Environment Reference Standard. No. S 245 Wednesday 26 May 2021

Victorian Government, Planning and Environment Act 1987 Section 12 (2) (a). Ministerial Direction No.1, 1987

Figures

Figure 1

Site Location & Surrounding Land Uses



Legend

Site Boundary

GDA2020
MGA Zone 55

Edge Group Pty Ltd.
423 City Road
South Melbourne, Victoria 3205
Phone: (03) 8625 9696
info@edgegroup.net.au
www.edgegroup.net.au

Site Location Plan
Preliminary Site Investigation
264 Plenty Road, Preston, VIC

A3	Drawn: ND	Date: 20/07/2022	Figure 1
	Rev.: 1	Project No.: 20220134	

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Figure 2

Site Features

Former horse track

West Escarpment

124 Hopetoun Park Rd

150 Hopetoun Park Rd

97 Hopetoun Park Rd

189 Hopetoun Park Rd

219 Hopetoun Park Rd

249 Hopetoun Park Rd

30 Kyle Lane

Stockpiles with concrete aggregate

Stockpile of bluestone / road base

259 Hopetoun Park Rd

Legend

- Site Boundary
- Site Addresses

GDA2020
MGA Zone 55

Edge Group Pty Ltd.
423 City Road
South Melbourne, Victoria 3205
Phone: (03) 8625 9696
info@edgegroup.net.au
www.edgegroup.net.au

Site Features

Preliminary Site Investigation
264 Plenty Road, Preston, VIC

A3	Drawn: ND	Date: 20/07/2022	Figure 2
	Rev.: 1	Project No.: 20220134	

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Figure 3

Borehole Location Plan

Legend

- Sample Points
- Site Boundary

GDA2020
MGA Zone 55

Edge Group Pty Ltd.
423 City Road
South Melbourne, Victoria 3205
Phone: (03) 8625 9696
info@edgegroup.net.au
www.edgegroup.net.au

Borehole Location Plan

Preliminary Site Investigation
264 Plenty Road, Preston, VIC

A3	Drawn: MP	Date: 20/07/2022	Figure 3
	Rev.: 1	Project No.: 20220134	

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Figure 4

Stockpile Location Plan

97 Hopetoun Park Rd

189 Hopetoun Park Rd

219 Hopetoun Park Rd

249 Hopetoun Park Rd

259 Hopetoun Park Rd

SP08
SP01
SP10
SP04
SP06
SP05

SP08
SP03
SP10
SP09
SP07
SP02
SP06
SP01
SP04
SP05

0 2.5 5 7.5 10 m

0 100 200 300 400 m

Legend

- Site Boundary
- Site Addresses
- Stockpile Sample Locations

N

GDA2020
MGA Zone 55

Edge Group Pty Ltd.
423 City Road
South Melbourne, Victoria 3205
Phone: (03) 8625 9696
info@edgegroup.net.au
www.edgegroup.net.au

Stockpile Location Plan
Preliminary Site Investigation
249 Hopetoun Park Road, Hopetoun Park, VIC, 3340

A3	Drawn: ED	Date: 28/06/2022	Figure 4
	Rev.: 0	Project No.: 20220134	

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Appendices

Appendix A – Laboratory Analytical Results

Table A1 – Soil Analytical Results: On Site Retention

Table A2 – Soil Analytical Results: Off-site Disposal

Table A3 – RPDs

Table A4 – Field Blanks

Site Specific EIL Calculations

Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	Acid Sulphate Soils	Particle Size		Particulates	BTEX								Cyanides	TRH						
				Analyte	pH (CaCl2)	Clay In soils <2um	Density	Organic Matter	Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	Cyanide (WAD)	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)
				Unit	-	%	g/cm3	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	0.1	1	0.01	0.5	1	0.2	0.5	0.5	0.5	0.5	0.5	0.2	1	10	10	50	50	100	100	50
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	5	0.7	480	*	*	*	*	*	*	*	50	*	280	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	3	0.5	160	55	*	*	40	*	*	*	45	*	110	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	4	0.6	390	*	*	*	95	*	*	*	40	*	230	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	170	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	50	85	70	*	*	105	*	*	*	180	120	120	300	2,800	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	65	105	125	*	*	45	*	*	*	180	120	120	1,300	5,600	*
	HILs[4]	Res A			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																			
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<10	<10	<50	<50	<100	<100	<50
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	7.5	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<10	<10	<50	<50	<100	<100	<50
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	8.2	17	2.69	1	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<10	<10	<50	<50	<100	<100	<50
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	8.4	-	-	0.9	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<10	<10	420	420	2,800	320	3,540
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	130	130	3,320	830	4,280
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<10	<10	<50	<50	170	<100	170
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	<1	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	-	<10	<10	<50	<50	<100	<100	<50

Notes

1 - NEPM 2013 Comm/Ind D and Res A/B HSL for Vapour Intrusion
2 - NEPM 2013 - Generic Ecological Investigation Levels: Comm/Ind and Urban Residential and Public Spaces
3 - NEPM 2013 Table 1B(6) ESLs for Comm/Ind and Urban Res
4 - NEPM 2013 Table 1A(1) HILs Res A, B and Comm/Ind D Soil
LOR - Limit of Reporting
NL - Not limiting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	Phenols																				
				Analyte	3&4-Methylphenol (m&p-cresol)	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,6-Dichlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-chloro-3-methylphenol	4-Nitrophenol	Pentachlorophenol	Picloram	Phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	1	0.03	0.05	0.05	0.03	0.5	5	0.03	0.05	0.03	0.5	0.5	5	5	0.03	5	0.2	0.02	0.5	0.03	1
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100	4,500	3,000	*	*

Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																				
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<1	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.02	<0.5	-	-
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	<1	<0.03	<0.05	<0.05	<0.03	<1	<5	<0.03	<0.05	<0.03	<1	<1	<5	<5	<0.03	<5	<0.2	-	<1	<0.03	<1
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	<1	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.02	<0.5	-	-
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	<1	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	-	<0.5	-	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<2	-	<1.2	<1.2	<1.2	<1.2	-	<1.2	-	<1.2	<1.2	<1.2	-	-	<1.2	-	<2	<0.02	<1.2	-	-
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<1	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	<0.04	<0.5	-	-
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	<1	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.5	-	<2	-	<0.5	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes
1 - NEPM 2013 Comm/Ind D and Res A/B HSL for Vapour Intrusion
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LOR - Limit of Reporting
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Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	Chlorinated Hydrocarbons																Halogenated Benzenes				
				Analyte	Chlorinated hydrocarbons EPAVic	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethene	1,2-dichloroethane	Carbon tetrachloride	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Hexachlorobutadiene	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	Vinyl chloride	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Hexachlorobenzene
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	0.01	0.01	0.01	0.02	0.04	0.01	0.02	0.01	0.02	0.01	0.4	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.03
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10
Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																				
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	<0.01	<0.01	<0.01	<0.02	<0.04	<0.01	<0.02	<0.01	<0.02	<0.01	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.03
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

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LOR - Limit of Reporting
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Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	Herbicides															PCBs	Pesticides						
				Analyte	2,4,5-Trichlorophenoxy Acetic Acid	2,4,5-TP (Silvex)	Hedonal	2,4-Dichlorprop	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	4-Chlorophenoxy acetic acid	Atrazine	Clopyralid	Dicamba	Dinoseb	Fluroxypyr	2-Methyl-4-chlorophenoxyacetic acid	2-Methyl-4-Chlorophenoxy Butanoic Acid	Mecoprop	Triclopyr	PCBs (Sum of total)	Bifenthrin	Demeton-S-methyl	Fenamiphos	Mirex	Parathion	Pirimphos-ethyl
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.02	0.02	5	0.02	0.02	0.02	0.02	0.02	0.1	0.05	0.05	0.05	0.05	0.2	0.05
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			600	*	900	*	*	*	320	*	*	*	*	600	600	600	*	1	600	*	*	10	*	*
Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																					
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	<0.1	-	-	-	-	-	-
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	<0.05	-	<0.2	<0.05
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.05	<0.04	<0.04	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.1	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

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Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	Organophosphorous Pesticides															TPH				
				Analyte	Azinophos methyl	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Diazinon	Dichlorvos	Dimethoate	Ethion	Fenthion	Malathion	Methyl parathion	Monocrotophos	Prothiofos	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.05	10	50	100	100	50
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			*	*	*	*	160	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																			
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<10	<50	<100	<100	<50
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<10	<50	<100	<100	<50
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<10	130	2,000	1,160	3,290
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<10	<50	2,050	1,570	3,620
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.05	<10	<50	<100	110	110
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	<50	<100	<100	<50

Notes
1 - NEPM 2013 Comm/Ind D and Res A/B HSL for Vapour Intrusion
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3 - NEPM 2013 Table 1B(6) ESLs for Comm/Ind and Urban Res
4 - NEPM 2013 Table 1A(1) HILs Res A, B and Comm/Ind D Soil
LOR - Limit of Reporting
NL - Not limiting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

				Chemical Group	Inorganics																	MAH	
				Analyte	Exchangeable Calcium Percent	Exchangeable Magnesium Percent	Exchangeable Potassium Percent	Exchangeable Sodium Percent	Magnesium/Potassium Ratio	Moisture Content	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Cation Exchange Capacity	Cyanide Total	Electrical Conductivity (Lab)	Calcium/Magnesium Ratio	Fluoride	pH (Lab)	Monocylic aromatic hydrocarbons EPAVic	Styrene
				Unit	%	%	%	%	-	%	meq/100g	meq/100g	meq/100g	meq/100g	meq/100g	mg/kg	µS/cm	-	mg/kg	-	mg/kg	mg/kg
				LOR	0.2	0.2	0.2	0.2	0.2	1	0.2	0.2	0.2	0.2	0.2	1	1	0.2	40	0.1	0.2	0.5
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																		
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	5.1	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	7.8	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	7.4	-	-	-	-	-	<1	-	-	180	-	<0.2	<0.5
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	7.3	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	5.7	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	5.5	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	38	35.7	8.1	18.2	4.4	11	4.7	4.4	1	2.2	12.4	-	615	1.1	-	9	-	-
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	8.2	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	13.2	45.6	7.3	33.9	6.3	14	3.9	13.4	2.1	10	29.5	-	1,560	0.3	-	9	-	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	3.2	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	-	-	-	-	4.8	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-

Notes
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LOR - Limit of Reporting
NL - Not limiting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

				Chemical Group	Metals																				Organic
				Analyte	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium (hexavalent)	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin	Vanadium	Zinc	Total Organic Carbon
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%
				LOR	5	10	1	50	1	0.5	2	2	5	*	5	5	0.1	2	2	5	2	5	5	5	*
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space			100	*	*	*	*	*	480[s]	*	210[s]	*	*	*	*	*	200[s]	*	*	*	*	520[s]	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A			100	*	60	4,500	20	100	*	100	6,000	*	300	3,800	40	*	400	200	*	*	*	7,400	*
Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																				
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<5	60	1	<50	<1	<0.5	23	18	25	-	5	450	<0.1	-	52	<5	-	-	34	44	-
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	9	110	2	<50	<1	-	40	14	14	-	13	177	<0.1	-	38	<5	-	-	54	22	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<5	-	-	-	<1	-	13	-	15	-	<5	-	<0.1	-	37	-	-	-	-	34	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<5	-	-	-	<1	-	9	-	14	-	<5	-	<0.1	-	39	-	-	-	-	27	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	<5	10	<1	<50	<1	-	8	<2	<5	-	<5	26	<0.1	-	2	<5	-	-	20	<5	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	<5	-	-	-	<1	-	16	-	9	-	6	-	<0.1	-	18	-	-	-	-	16	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	<5	-	-	-	<1	-	19	-	10	-	6	-	<0.1	-	26	-	-	-	-	18	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	6	40	<1	<50	<1	-	42	15	8	-	8	89	<0.1	-	29	<5	-	-	64	9	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	<5	-	-	-	<1	-	14	-	20	-	15	-	<0.1	-	34	-	-	-	-	52	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	8	-	-	-	<1	<0.5	-	-	14	-	13	-	<0.1	<2	33	<5	<2	<5	-	36	-
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	6	80	<1	<50	<1	-	31	12	12	-	13	256	<0.1	-	27	<5	-	-	34	36	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	7	-	-	-	<1	-	52	-	20	-	14	-	<0.1	-	51	-	-	-	-	33	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	5	-	-	-	<1	-	28	-	11	-	13	-	<0.1	-	24	-	-	-	-	31	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	6	-	-	-	<1	-	31	-	13	-	12	-	<0.1	-	28	-	-	-	-	36	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	<5	110	<1	<50	<1	<0.5	17	19	19	2.6	8	691	<0.1	-	79	<5	-	-	16	52	0.6
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	<5	-	-	-	<1	-	16	-	9	-	40	-	<0.1	-	14	-	-	-	-	56	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	8	-	-	-	<1	-	31	-	16	3.9	12	-	<0.1	-	45	-	-	-	-	24	0.5
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<5	30	<1	<50	<1	<0.5	10	3	9	-	32	91	<0.1	-	6	<5	-	-	24	175	-
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	6	-	-	-	<1	-	11	-	12	-	52	-	<0.1	-	7	-	-	-	-	107	-
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	<5	-	-	-	<1	-	18	-	8	-	7	-	<0.1	-	22	-	-	-	-	17	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	<5	70	<1	<50	<1	<0.5	12	4	11	-	141	109	0.1	-	8	<5	-	-	21	321	-
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	<5	-	-	-	<1	-	20	-	7	-	6	-	<0.1	-	15	-	-	-	-	22	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	<5	-	-	-	<1	-	14	-	15	-	16	-	<0.1	-	66	-	-	-	-	80	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	5	-	-	-	<1	-	25	-	10	-	10	-	<0.1	-	23	-	-	-	-	24	-

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Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

			Chemical Group	Organochlorine Pesticides																										
			Analyte	Organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
			Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
			LOR	0.03	0.05	0.03	0.03	0.05	0.03	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.03	0.05	0.03	0.03	0.03	0.03	0.03	0.05	0.03	0.03	0.03	0.03	0.03	2
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space		*	*	*	*	*	*	*	*	*	*	*	180	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A		*	*	*	*	6	*	50	*	*	*	*	*	240	*	270	*	*	*	10	*	*	*	6	*	300	20	

Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																									
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<2
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	<0.03	<0.05	<0.03	<0.03	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	-	<0.03	-	<0.03	<0.03	<0.03	<0.03	<0.03	-	<0.03	<0.03	<0.03	<0.03	-
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<2
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<2
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<0.05	<0.05	<0.05	0.56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	0.56	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<2
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

1 - NEPM 2013 Comm/Ind D and Res A/B HSL for Vapour Intrusion
2 - NEPM 2013 - Generic Ecological Investigation Levels: Comm/Ind and Urban Residential and Public Spaces
3 - NEPM 2013 Table 1B(6) ESLs for Comm/Ind and Urban Res
4 - NEPM 2013 Table 1A(1) HILs Res A, B and Comm/Ind D Soil
LOR - Limit of Reporting
NL - Not limiting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A1 - Soil Analytical Results: On-site Retention

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

				Chemical Group	PAH																					
				Analyte	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Zero)	PAHs (Sum of total)	PAHs (Vic EPA List)
				Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
				LOR	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NEPM 2013	HSLs Vapour Intrusion[1]	Res A/B, Clay	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5	*	*	*	*	*	*	*	*
		Res A/B, Sand	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3	*	*	*	*	*	*	*	*
		Res A/B, Silt	>=0m, <1m	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	*	*	*	*	*	*	*	*
	EILs[2]	Urban Res & Public Open Space		*	*	*	*	*	*	*	*	*	*	*	*	*	*	170	*	*	*	*	*	*	*	*
	ESLs[3]	Urban Res, Coarse Soil	>=0m, <2m	*	*	*	*	*	0.7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
		Urban Res, Fine Soil	>=0m, <2m	*	*	*	*	*	0.7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	HILs[4]	Res A		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3	3	3	300	300

Sample Code	Location	Field ID	Date	Depth (mbgl)	Matrix Type																					
EM2211061001	Horse Training Track	BH01 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061002		BH01 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061004		BH02 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061007		BH03 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061008		BH03 - 0.5	9/06/2022	0.5	Clayey SILT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061010		BH04 - 0.1	9/06/2022	0.1	FILL - Clayey SAND	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061013		BH05 - 0.1	9/06/2022	0.1	FILL - Gravelly CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061014		BH05 - 0.5	9/06/2022	0.5	NAT- Silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061016		BH06 - 0.1	9/06/2022	0.1	FILL - Sandy CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061020	Stockpile	SP01	9/06/2022	0.1	FILL - Clay	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	-	<0.5
EM2211061022		SP03	9/06/2022	0.1	FILL - Clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061024		SP05	9/06/2022	0.1	FILL - Clay	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061026		SP07	9/06/2022	0.1	FILL - Clay	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061028		SP09	9/06/2022	0.1	FILL - Clay	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061019	Shed Area	BH07 - 0.1	9/06/2022	0.1	FILL - Reworked CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061030		BH08 - 0.1	9/06/2022	0.1	FILL - Clayey SLIT	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061031		BH09 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061033		BH09 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	1.4	2.9	<0.5	<0.7	-
EM2211061036		BH10 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061037		BH10 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061039		BH11 - 0.1	9/06/2022	0.1	FILL - Silty CLAY	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	-
EM2211061040		BH11 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061042		BH12 - 0.1	9/06/2022	0.1	FILL - Gravel with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM2211061043		BH12 - 0.5	9/06/2022	0.5	NAT - CLAY with silt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes
1 - NEPM 2013 Comm/Ind D and Res A/B HSL for Vapour Intrusion
2 - NEPM 2013 - Generic Ecological Investigation Levels: Comm/Ind and Urban Residential and Public Spaces
3 - NEPM 2013 Table 1B(6) ESLs for Comm/Ind and Urban Res
4 - NEPM 2013 Table 1A(1) HILs Res A, B and Comm/Ind D Soil
LOR - Limit of Reporting
NL - Not limiting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed
s - Site Specific EIL

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

							Sample Code	EM2211061001	EM2211061002	EM2211061004	EM2211061007	EM2211061008	EM2211061010	EM2211061013	EM2211061014	EM2211061016
							Location	Trotting Track								
							Field ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1
							Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
							Depth	0.1	0.5	0.1	0.1	0.5	0.1	0.1	0.5	0.1
							Matrix Type	FILL - Sandy CLAY	NAT- Silty CLAY	FILL - Sandy CLAY	FILL - Sandy CLAY	Clayey SILT	FILL - Clayey SAND	FILL - Gravelly CLAY	NAT- Silty CLAY	FILL - Sandy CLAY
			EPA Vic IWRG1828.2[1]													
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill										
Acid Sulphate Soils																
pH (CaCl2)	-	0.1	*	*	*	*	-	-	-	-	-	-	-	-	-	
Particle Size																
Clay in soils <2um	%	1	*	*	*	*	-	-	-	-	-	-	-	-	-	
Density	g/cm3	0.01	*	*	*	*	-	-	-	-	-	-	-	-	-	
BTEX																
Naphthalene (VOC)	mg/kg	1	*	*	*	*	<1	-	<1	<1	-	<1	<1	-	<1	
Benzene	mg/kg	0.2	16	4	4	1	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	
Toluene	mg/kg	0.5	12,800	3,200	3,200	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Ethylbenzene	mg/kg	0.5	4,800	1,200	1,200	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Xylene (m & p)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Xylene (o)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Xylene Total	mg/kg	0.5	9,600	2,400	2,400	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Total BTEX	mg/kg	0.2	*	*	*	*	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	
PAH																
Benzo(b+j+k)fluoranthene	mg/kg	1	*	*	*	*	-	-	-	-	-	-	-	-	-	
Acenaphthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Acenaphthylene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(a)anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(a) pyrene	mg/kg	0.5	160	40	20	1	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(b+j)fluoranthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(g,h,i)perylene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(k)fluoranthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Chrysene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Dibenz(a,h)anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Fluoranthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Fluorene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Naphthalene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Phenanthrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Pyrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	*	*	*	*	0.6	-	0.6	0.6	-	0.6	0.6	-	0.6	
Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	*	*	*	*	1.2	-	1.2	1.2	-	1.2	1.2	-	1.2	
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
PAHs (Sum of total)	mg/kg	0.5	400	100	50	20	<0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	<0.5	
PAHs (Vic EPA List)	mg/kg	0.5	400	100	50	20	-	-	-	-	-	-	-	-	-	
Chlorinated Hydrocarbons																
Chlorinated hydrocarbons EPAVic	mg/kg	0.01	*	*	*	1	-	-	-	-	-	-	-	-	-	
1,1,1,2-tetrachloroethane	mg/kg	0.01	1,600	400	400	*	-	-	-	-	-	-	-	-	-	
1,1,1-trichloroethane	mg/kg	0.01	4,800	1,200	1,200	*	-	-	-	-	-	-	-	-	-	
1,1,2,2-tetrachloroethane	mg/kg	0.02	210	52	52	*	-	-	-	-	-	-	-	-	-	
1,1,2-trichloroethane	mg/kg	0.04	190	48	48	*	-	-	-	-	-	-	-	-	-	
1,1-dichloroethene	mg/kg	0.01	480	120	120	*	-	-	-	-	-	-	-	-	-	
1,2-dichloroethane	mg/kg	0.02	48	12	12	*	-	-	-	-	-	-	-	-	-	
Carbon tetrachloride	mg/kg	0.01	48	12	12	*	-	-	-	-	-	-	-	-	-	
Chloroform	mg/kg	0.02	960	240	240	*	-	-	-	-	-	-	-	-	-	
cis-1,2-dichloroethene	mg/kg	0.01	*	*	*	*	-	-	-	-	-	-	-	-	-	
Dichloromethane	mg/kg	0.4	64	16	16	*	-	-	-	-	-	-	-	-	-	
Hexachlorobutadiene	mg/kg	0.02	11	2.8	2.8	*	-	-	-	-	-	-	-	-	-	
Trichloroethene	mg/kg	0.02	80	20	20	*	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	mg/kg	0.02	800	200	200	*	-	-	-	-	-	-	-	-	-	
trans-1,2-dichloroethene	mg/kg	0.02	*	*	*	*	-	-	-	-	-	-	-	-	-	
Vinyl chloride	mg/kg	0.02	4.8	1.2	1.2	*	-	-	-	-	-	-	-	-	-	

Notes

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* No Relevant Criteria
- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

						Sample Code	EM2211061001	EM2211061002	EM2211061004	EM2211061007	EM2211061008	EM2211061010	EM2211061013	EM2211061014	EM2211061016
						Location	Trotting Track								
						Field ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.5	0.1	0.1	0.5	0.1	0.1	0.5	0.1
						Matrix Type	FILL - Sandy CLAY	NAT- Silty CLAY	FILL - Sandy CLAY	FILL - Sandy CLAY	Clayey SILT	FILL - Clayey SAND	FILL - Gravelly CLAY	NAT- Silty CLAY	FILL - Sandy CLAY
			EPA Vic IWRG1828.2[1]												
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill									
Halogenated Benzenes															
1,2,4-trichlorobenzene	mg/kg	0.01	*	*	*	*	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.02	24,000	6,000	6,000	*	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.02	640	160	160	*	-	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	0.02	4,800	1,200	1,200	*	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Herbicides															
2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
2,4,5-TP (Silvex)	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Hedonal	mg/kg	0.02	480	120	120	*	<0.02	-	-	-	-	-	-	-	-
2,4-Dichlorprop	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
(2,4-DB)	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
4-Chlorophenoxy acetic acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Atrazine	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Clopyralid	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Dicamba	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Dinoseb	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-
Fluroxypyr	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Mecoprop	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Triclopyr	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Metals															
Arsenic	mg/kg	5	2,000	500	500	20	<5	9	<5	<5	<5	<5	<5	6	<5
Barium	mg/kg	10	25,000	6,250	6,250	*	60	110	-	-	10	-	-	40	-
Beryllium	mg/kg	1	400	100	100	*	1	2	-	-	<1	-	-	<1	-
Boron	mg/kg	50	60,000	15,000	15,000	*	<50	<50	-	-	<50	-	-	<50	-
Cadmium	mg/kg	1	400	100	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2,000	500	500	1	<0.5	-	-	-	-	-	-	-	-
Chromium (III+VI)	mg/kg	2	*	*	*	*	23	40	13	9	8	16	19	42	14
Cobalt	mg/kg	2	*	*	*	*	18	14	-	-	<2	-	-	15	-
Copper	mg/kg	5	20,000	5,000	5,000	100	25	14	15	14	<5	9	10	8	20
Iron	%		*	*	*	*	-	-	-	-	-	-	-	-	-
Lead	mg/kg	5	6,000	1,500	1,500	300	5	13	<5	<5	<5	6	6	8	15
Manganese	mg/kg	5	*	*	*	*	450	177	-	-	26	-	-	89	-
Mercury	mg/kg	0.1	300	75	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4,000	1,000	1,000	40	-	-	-	-	-	-	-	-	-
Nickel	mg/kg	2	12,000	3,000	3,000	60	52	38	37	39	2	18	26	29	34
Selenium	mg/kg	5	40,000	10,000	10,000	10	<5	<5	-	-	<5	-	-	<5	-
Silver	mg/kg	2	720	180	180	10	-	-	-	-	-	-	-	-	-
Tin	mg/kg	5	*	*	*	50	-	-	-	-	-	-	-	-	-
Vanadium	mg/kg	5	*	*	*	*	34	54	-	-	20	-	-	64	-
Zinc	mg/kg	5	140,000	35,000	35,000	200	44	22	34	27	<5	16	18	9	52

Notes

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* No Relevant Criteria
- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

						Sample Code	EM2211061001	EM2211061002	EM2211061004	EM2211061007	EM2211061008	EM2211061010	EM2211061013	EM2211061014	EM2211061016
						Location	Trotting Track								
						Field ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.5	0.1	0.1	0.5	0.1	0.1	0.5	0.1
						Matrix Type	FILL - Sandy CLAY	NAT- Silty CLAY	FILL - Sandy CLAY	FILL - Sandy CLAY	Clayey SILT	FILL - Clayey SAND	FILL - Gravelly CLAY	NAT- Silty CLAY	FILL - Sandy CLAY
				EPA Vic IWRG1828.2[1]											
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill									
Organic															
Total Organic Carbon	%		*	*	*	*	-	-	-	-	-	-	-	-	-
Organochlorine Pesticides															
Organochlorine pesticides EPAVic	mg/kg	0.03	*	*	*	1	-	-	-	-	-	-	-	-	-
4,4-DDE	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
a-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Aldrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Aldrin + Dieldrin	mg/kg	0.05	4.8	1.2	1.2	*	<0.05	-	-	-	-	-	-	-	-
b-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Chlordane	mg/kg	0.03	16	4	4	*	-	-	-	-	-	-	-	-	-
Chlordane (cis)	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Chlordane (trans)	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
d-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
DDD	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
DDT	mg/kg	0.05	*	*	*	*	<0.2	-	-	-	-	-	-	-	-
DDT+DDE+DDD	mg/kg	0.05	50	50	50	*	<0.05	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endosulfan	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endosulfan I	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endosulfan II	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endrin aldehyde	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
g-BHC (Lindane)	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.03	4.8	1.2	1.2	*	<0.05	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.03	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.03	*	*	*	*	<0.2	-	-	-	-	-	-	-	-
Toxaphene	mg/kg	2	*	*	*	*	<2	-	-	-	-	-	-	-	-
Inorganics															
Exchangeable Calcium Percent	%	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Magnesium Percent	%	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Potassium Percent	%	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Sodium Percent	%	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Magnesium/Potassium Ratio	-	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Moisture Content	%	1	*	*	*	*	6.8	24.2	5.1	6.2	5.5	14.3	18.8	18.1	7.8
Exchangeable Calcium	meq/100g	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Magnesium	meq/100g	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Potassium	meq/100g	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Exchangeable Sodium	meq/100g	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Cation Exchange Capacity	meq/100g	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Cyanide Total	mg/kg	1	10,000	2,500	2,500	50	-	-	-	-	-	-	-	-	-
Electrical Conductivity (Lab)	µS/cm	1	*	*	*	*	-	-	-	-	-	-	-	-	-
Calcium/Magnesium Ratio	-	0.2	*	*	*	*	-	-	-	-	-	-	-	-	-
Fluoride	mg/kg	40	40,000	10,000	10,000	450	-	-	-	-	-	-	-	-	-
pH (Lab)	-	0.1	2-12.5	*	4-10	4-10	-	-	-	-	-	-	-	-	-
MAH															
EPAVic	mg/kg	0.2	*	*	*	7	-	-	-	-	-	-	-	-	-
Styrene	mg/kg	0.5	480	120	120	*	-	-	-	-	-	-	-	-	-
Particulates															
Organic Matter	%	0.5	*	*	*	*	-	-	-	-	-	-	-	-	-
PCBs															
PCBs (Sum of total)	mg/kg	0.1	6	50	2	2	<0.1	-	-	-	-	-	-	-	-
Cyanides															
Cyanide (WAD)	mg/kg	1	*	*	*	*	<1	-	-	-	-	-	-	-	-

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						Sample Code	EM2211061001	EM2211061002	EM2211061004	EM2211061007	EM2211061008	EM2211061010	EM2211061013	EM2211061014	EM2211061016
						Location	Trotting Track								
						Field ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.5	0.1	0.1	0.5	0.1	0.1	0.5	0.1
						Matrix Type	FILL - Sandy CLAY	NAT- Silty CLAY	FILL - Sandy CLAY	FILL - Sandy CLAY	Clayey SILT	FILL - Clayey SAND	FILL - Gravelly CLAY	NAT- Silty CLAY	FILL - Sandy CLAY
			EPA Vic IWRG1828.2[1]												
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill									
TRH															
C6-C10 Fraction (F1)	mg/kg	10	*	*	*	*	<10	-	<10	<10	-	<10	<10	-	<10
C6-C10 (F1 minus BTEX)	mg/kg	10	*	*	*	*	<10	-	<10	<10	-	<10	<10	-	<10
>C10-C16 Fraction (F2)	mg/kg	50	*	*	*	*	<50	-	<50	<50	-	<50	<50	-	<50
>C10-C16 Fraction (F2 minus [illegible])	mg/kg	50	*	*	*	*	<50	-	<50	<50	-	<50	<50	-	<50
>C16-C34 Fraction (F3)	mg/kg	100	*	*	*	*	<100	-	<100	<100	-	<100	<100	-	<100
>C34-C40 Fraction (F4)	mg/kg	100	*	*	*	*	<100	-	<100	<100	-	<100	<100	-	<100
>C10-C40 Fraction (Sum)	mg/kg	50	*	*	*	*	<50	-	<50	<50	-	<50	<50	-	<50
Phenols															
3&4-Methylphenol (m&p-cresol)	mg/kg	1	*	*	*	*	<1	-	-	-	-	-	-	-	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.03	*	*	*	*	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	64,000	16,000	16,000	*	<0.5	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.05	320	80	80	*	<0.5	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.03	3,200	800	800	*	<0.5	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.5	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-
2,6-Dichlorophenol	mg/kg	0.03	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05	*	*	*	*	-	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	0.03	4,800	1,200	1,200	*	<0.5	-	-	-	-	-	-	-	-
2-Methylphenol	mg/kg	0.5	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
2-Nitrophenol	mg/kg	0.5	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	0.03	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
4-Nitrophenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.2	*	*	*	*	<2	-	-	-	-	-	-	-	-
Picloram	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	*	*	*	*	<0.5	-	-	-	-	-	-	-	-
Phenols (halogenated) EPAVic	mg/kg	0.03	*	*	*	1	-	-	-	-	-	-	-	-	-
Phenols (non-halogenated) EPAVic	mg/kg	1	2,200	560	560	60	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides															
Azinophos methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Bromophos-ethyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Carbophenothion	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Chlorfenvinphos	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Chlorpyrifos	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Diazinon	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Ethion	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Fenthion	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Malathion	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Methyl parathion	mg/kg	0.2	*	*	*	*	<0.2	-	-	-	-	-	-	-	-
Monocrotophos	mg/kg	0.2	*	*	*	*	<0.2	-	-	-	-	-	-	-	-
Prothiofos	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Pesticides															
Bifenthrin	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Fenamiphos	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
Parathion	mg/kg	0.2	*	*	*	*	<0.2	-	-	-	-	-	-	-	-
Pirimphos-ethyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-	-	-	-	-
TPH															
C6-C9 Fraction	mg/kg	10	2,600	650	325	100	<10	-	<10	<10	-	<10	<10	-	<10
C10-C14 Fraction	mg/kg	50	*	*	*	*	<50	-	<50	<50	-	<50	<50	-	<50
C15-C28 Fraction	mg/kg	100	*	*	*	*	<100	-	<100	<100	-	<100	<100	-	<100
C29-C36 Fraction	mg/kg	100	*	*	*	*	<100	-	<100	<100	-	<100	<100	-	<100
C10-C36 Fraction (Sum)	mg/kg	50	40,000	10,000	5,000	1,000	<50	-	<50	<50	-	<50	<50	-	<50

Notes

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- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

			Sample Code				EM2211061020	EM2211061022	EM2211061024	EM2211061026	EM2211061028
			Location				Stockpile				
			Field ID				SP01	SP03	SP05	SP07	SP09
			Date				9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
			Depth				0.1	0.1	0.1	0.1	0.1
			Matrix Type				FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay
			EPA Vic IWRG1828.2[1]								
Analyte	**Unit**	**LOR**	Cat B	Cat C	Cat D	Fill					
Acid Sulphate Soils											
pH (CaCl2)	-	0.1	*	*	*	*	7.5	-	-	-	-
Particle Size											
Clay in soils <2um	%	1	*	*	*	*	-	-	-	-	-
Density	g/cm3	0.01	*	*	*	*	-	-	-	-	-
BTEX											
Naphthalene (VOC)	mg/kg	1	*	*	*	*	<1	-	<1	<1	<1
Benzene	mg/kg	0.2	16	4	4	1	<0.2	-	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5	12,800	3,200	3,200	*	<0.5	-	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5	4,800	1,200	1,200	*	<0.5	-	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5	9,600	2,400	2,400	*	<0.5	-	<0.5	<0.5	<0.5
Total BTEX	mg/kg	0.2	*	*	*	*	-	-	<0.2	<0.2	<0.2
PAH											
Benzo(b+j+k)fluoranthene	mg/kg	1	*	*	*	*	<1.0	-	-	-	-
Acenaphthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Benzo(a)anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Benzo(a) pyrene	mg/kg	0.5	160	40	20	1	<0.5	-	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	mg/kg	0.5	*	*	*	*	-	-	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.5	*	*	*	*	-	-	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	*	*	*	*	0.6	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	*	*	*	*	1.2	-	1.2	1.2	1.2
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<0.5	<0.5
PAHs (Sum of total)	mg/kg	0.5	400	100	50	20	-	-	<0.5	<0.5	<0.5
PAHs (Vic EPA List)	mg/kg	0.5	400	100	50	20	<0.5	-	-	-	-
Chlorinated Hydrocarbons											
Chlorinated hydrocarbons EPAVic	mg/kg	0.01	*	*	*	1	<0.01	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.01	1,600	400	400	*	<0.01	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.01	4,800	1,200	1,200	*	<0.01	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.02	210	52	52	*	<0.02	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.04	190	48	48	*	<0.04	-	-	-	-
1,1-dichloroethene	mg/kg	0.01	480	120	120	*	<0.01	-	-	-	-
1,2-dichloroethane	mg/kg	0.02	48	12	12	*	<0.02	-	-	-	-
Carbon tetrachloride	mg/kg	0.01	48	12	12	*	<0.01	-	-	-	-
Chloroform	mg/kg	0.02	960	240	240	*	<0.02	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.01	*	*	*	*	<0.01	-	-	-	-
Dichloromethane	mg/kg	0.4	64	16	16	*	<0.4	-	-	-	-
Hexachlorobutadiene	mg/kg	0.02	11	2.8	2.8	*	<0.02	-	-	-	-
Trichloroethene	mg/kg	0.02	80	20	20	*	<0.02	-	-	-	-
Tetrachloroethene	mg/kg	0.02	800	200	200	*	<0.02	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.02	*	*	*	*	<0.02	-	-	-	-
Vinyl chloride	mg/kg	0.02	4.8	1.2	1.2	*	<0.02	-	-	-	-

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						Sample Code	EM2211061020	EM2211061022	EM2211061024	EM2211061026	EM2211061028
						Location	Stockpile				
						Field ID	SP01	SP03	SP05	SP07	SP09
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.1	0.1	0.1	0.1
						Matrix Type	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay
			EPA Vic IWRG1828.2[1]								
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill					
Halogenated Benzenes											
1,2,4-trichlorobenzene	mg/kg	0.01	*	*	*	*	<0.01	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.02	24,000	6,000	6,000	*	<0.02	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.02	640	160	160	*	<0.02	-	-	-	-
Chlorobenzene	mg/kg	0.02	4,800	1,200	1,200	*	<0.02	-	-	-	-
Hexachlorobenzene	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Herbicides											
2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.02	*	*	*	*	-	-	-	-	-
2,4,5-TP (Silvex)	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Hedonal	mg/kg	0.02	480	120	120	*	-	-	-	-	-
2,4-Dichlorprop	mg/kg	0.02	*	*	*	*	-	-	-	-	-
(2,4-DB)	mg/kg	0.02	*	*	*	*	-	-	-	-	-
4-Chlorophenoxy acetic acid	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Atrazine	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Clopyralid	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Dicamba	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Dinoseb	mg/kg	5	*	*	*	*	<5	-	-	-	-
Fluroxypyr	mg/kg	0.02	*	*	*	*	-	-	-	-	-
2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Acid	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Mecoprop	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Triclopyr	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Metals											
Arsenic	mg/kg	5	2,000	500	500	20	8	6	7	5	6
Barium	mg/kg	10	25,000	6,250	6,250	*	-	80	-	-	-
Beryllium	mg/kg	1	400	100	100	*	-	<1	-	-	-
Boron	mg/kg	50	60,000	15,000	15,000	*	-	<50	-	-	-
Cadmium	mg/kg	1	400	100	100	3	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2,000	500	500	1	<0.5	-	-	-	-
Chromium (III+VI)	mg/kg	2	*	*	*	*	-	31	52	28	31
Cobalt	mg/kg	2	*	*	*	*	-	12	-	-	-
Copper	mg/kg	5	20,000	5,000	5,000	100	14	12	20	11	13
Iron	%		*	*	*	*	-	-	-	-	-
Lead	mg/kg	5	6,000	1,500	1,500	300	13	13	14	13	12
Manganese	mg/kg	5	*	*	*	*	-	256	-	-	-
Mercury	mg/kg	0.1	300	75	75	1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4,000	1,000	1,000	40	<2	-	-	-	-
Nickel	mg/kg	2	12,000	3,000	3,000	60	33	27	51	24	28
Selenium	mg/kg	5	40,000	10,000	10,000	10	<5	<5	-	-	-
Silver	mg/kg	2	720	180	180	10	<2	-	-	-	-
Tin	mg/kg	5	*	*	*	50	<5	-	-	-	-
Vanadium	mg/kg	5	*	*	*	*	-	34	-	-	-
Zinc	mg/kg	5	140,000	35,000	35,000	200	36	36	33	31	36

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			Sample Code				EM2211061020	EM2211061022	EM2211061024	EM2211061026	EM2211061028
			Location				Stockpile				
			Field ID				SP01	SP03	SP05	SP07	SP09
			Date				9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
			Depth				0.1	0.1	0.1	0.1	0.1
			Matrix Type				FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay
			EPA Vic IWRG1828.2[1]								
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill					
Organic											
Total Organic Carbon	%		*	*	*	*	-	-	-	-	-
Organochlorine Pesticides											
Organochlorine pesticides EPAVic	mg/kg	0.03	*	*	*	1	<0.03	-	-	-	-
4,4-DDE	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-
a-BHC	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Aldrin	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Aldrin + Dieldrin	mg/kg	0.05	4.8	1.2	1.2	*	-	-	-	-	-
b-BHC	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Chlordane	mg/kg	0.03	16	4	4	*	<0.03	-	-	-	-
Chlordane (cis)	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Chlordane (trans)	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
d-BHC	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
DDD	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-
DDT	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-
DDT+DDE+DDD	mg/kg	0.05	50	50	50	*	-	-	-	-	-
Dieldrin	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endosulfan	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Endosulfan I	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endosulfan II	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endosulfan sulphate	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endrin	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endrin aldehyde	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Endrin ketone	mg/kg	0.05	*	*	*	*	-	-	-	-	-
g-BHC (Lindane)	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Heptachlor	mg/kg	0.03	4.8	1.2	1.2	*	<0.03	-	-	-	-
Heptachlor epoxide	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Methoxychlor	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
Toxaphene	mg/kg	2	*	*	*	*	-	-	-	-	-
Inorganics											
Exchangeable Calcium Percent	%	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Magnesium Percent	%	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Potassium Percent	%	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Sodium Percent	%	0.2	*	*	*	*	-	-	-	-	-
Magnesium/Potassium Ratio	-	0.2	*	*	*	*	-	-	-	-	-
Moisture Content	%	1	*	*	*	*	7.4	7.3	15.8	5.7	5.5
Exchangeable Calcium	meq/100g	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Magnesium	meq/100g	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Potassium	meq/100g	0.2	*	*	*	*	-	-	-	-	-
Exchangeable Sodium	meq/100g	0.2	*	*	*	*	-	-	-	-	-
Cation Exchange Capacity	meq/100g	0.2	*	*	*	*	-	-	-	-	-
Cyanide Total	mg/kg	1	10,000	2,500	2,500	50	<1	-	-	-	-
Electrical Conductivity (Lab)	µS/cm	1	*	*	*	*	-	-	-	-	-
Calcium/Magnesium Ratio	-	0.2	*	*	*	*	-	-	-	-	-
Fluoride	mg/kg	40	40,000	10,000	10,000	450	180	-	-	-	-
pH (Lab)	-	0.1	2-12.5	*	4-10	4-10	-	-	-	-	-
MAH											
EPAVic	mg/kg	0.2	*	*	*	7	<0.2	-	-	-	-
Styrene	mg/kg	0.5	480	120	120	*	<0.5	-	-	-	-
Particulates											
Organic Matter	%	0.5	*	*	*	*	-	-	-	-	-
PCBs											
PCBs (Sum of total)	mg/kg	0.1	6	50	2	2	<0.1	-	-	-	-
Cyanides											
Cyanide (WAD)	mg/kg	1	*	*	*	*	-	-	-	-	-

Notes

1 - EPA Victoria, July 2021, EPA Vic IWRG1828.2

mbgl - Meters Below Ground Level

LOR - Limit of Reporting

Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).

< Result is less than the laboratory limit of reporting (LOR)

* No Relevant Criteria

- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

						Sample Code	EM2211061020	EM2211061022	EM2211061024	EM2211061026	EM2211061028
						Location	Stockpile				
						Field ID	SP01	SP03	SP05	SP07	SP09
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.1	0.1	0.1	0.1
						Matrix Type	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay	FILL - Clay
			EPA Vic IWRG1828.2[1]								
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill					
TRH											
C6-C10 Fraction (F1)	mg/kg	10	*	*	*	*	<10	-	<10	<10	<10
C6-C10 (F1 minus BTEX)	mg/kg	10	*	*	*	*	<10	-	<10	<10	<10
>C10-C16 Fraction (F2)	mg/kg	50	*	*	*	*	<50	-	<50	<50	<50
>C10-C16 Fraction (F2 minus [illegible])	mg/kg	50	*	*	*	*	<50	-	<50	<50	<50
>C16-C34 Fraction (F3)	mg/kg	100	*	*	*	*	<100	-	<100	<100	<100
>C34-C40 Fraction (F4)	mg/kg	100	*	*	*	*	<100	-	<100	<100	<100
>C10-C40 Fraction (Sum)	mg/kg	50	*	*	*	*	<50	-	<50	<50	<50
Phenols											
3&4-Methylphenol (m&p-cresol)	mg/kg	1	*	*	*	*	<1	-	-	-	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	64,000	16,000	16,000	*	<0.05	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.05	320	80	80	*	<0.05	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.03	3,200	800	800	*	<0.03	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.5	*	*	*	*	<1	-	-	-	-
2,4-Dinitrophenol	mg/kg	5	*	*	*	*	<5	-	-	-	-
2,6-Dichlorophenol	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05	*	*	*	*	<0.05	-	-	-	-
2-Chlorophenol	mg/kg	0.03	4,800	1,200	1,200	*	<0.03	-	-	-	-
2-Methylphenol	mg/kg	0.5	*	*	*	*	<1	-	-	-	-
2-Nitrophenol	mg/kg	0.5	*	*	*	*	<1	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg	5	*	*	*	*	<5	-	-	-	-
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5	*	*	*	*	<5	-	-	-	-
4-chloro-3-methylphenol	mg/kg	0.03	*	*	*	*	<0.03	-	-	-	-
4-Nitrophenol	mg/kg	5	*	*	*	*	<5	-	-	-	-
Pentachlorophenol	mg/kg	0.2	*	*	*	*	<0.2	-	-	-	-
Picloram	mg/kg	0.02	*	*	*	*	-	-	-	-	-
Phenol	mg/kg	0.5	*	*	*	*	<1	-	-	-	-
Phenols (halogenated) EPAVic	mg/kg	0.03	*	*	*	1	<0.03	-	-	-	-
Phenols (non-halogenated) EPAVic	mg/kg	1	2,200	560	560	60	<1	-	-	-	-
Organophosphorous Pesticides											
Azinophos methyl	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Bromophos-ethyl	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Carbophenothion	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Chlorfenvinphos	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Chlorpyrifos	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Diazinon	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Dichlorvos	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Dimethoate	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Ethion	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Fenthion	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Malathion	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Methyl parathion	mg/kg	0.2	*	*	*	*	-	-	-	-	-
Monocrotophos	mg/kg	0.2	*	*	*	*	-	-	-	-	-
Prothiofos	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Pesticides											
Bifenthrin	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Demeton-S-methyl	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Fenamiphos	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Mirex	mg/kg	0.05	*	*	*	*	-	-	-	-	-
Parathion	mg/kg	0.2	*	*	*	*	-	-	-	-	-
Pirimphos-ethyl	mg/kg	0.05	*	*	*	*	-	-	-	-	-
TPH											
C6-C9 Fraction	mg/kg	10	2,600	650	325	100	<10	-	<10	<10	<10
C10-C14 Fraction	mg/kg	50	*	*	*	*	<50	-	<50	<50	<50
C15-C28 Fraction	mg/kg	100	*	*	*	*	<100	-	<100	<100	<100
C29-C36 Fraction	mg/kg	100	*	*	*	*	<100	-	<100	<100	<100
C10-C36 Fraction (Sum)	mg/kg	50	40,000	10,000	5,000	1,000	<50	-	<50	<50	<50

Notes

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mbgl - Meters Below Ground Level
LOR - Limit of Reporting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

							Sample Code	EM2211061019	EM2211061030	EM2211061031	EM2211061033	EM2211061036	EM2211061037	EM2211061039	EM2211061040	EM2211061042	EM2211061043
							Location	Shed Area									
							Field ID	BH07 - 0.1	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5
							Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
							Depth	0.1	0.1	0.5	0.1	0.1	0.5	0.1	0.5	0.1	0.5
							Matrix Type	FILL - Reworked CLAY	FILL - Clayey SLIT	NAT - CLAY with silt	FILL - Silty CLAY	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Gravel with silt	NAT - CLAY with silt
					EPA Vic IWRG1828.2[1]												
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill											
Acid Sulphate Soils																	
pH (CaCl2)	-	0.1	*	*	*	*		8.2	-	8.4	-	-	-	-	-	-	-
Particle Size																	
Clay in soils <2um	%	1	*	*	*	*		17	-	-	-	-	-	-	-	-	-
Density	g/cm3	0.01	*	*	*	*		2.69	-	-	-	-	-	-	-	-	-
BTEX																	
Naphthalene (VOC)	mg/kg	1	*	*	*	*		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	mg/kg	0.2	16	4	4	1		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5	12,800	3,200	3,200	*		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5	4,800	1,200	1,200	*		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5	9,600	2,400	2,400	*		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total BTEX	mg/kg	0.2	*	*	*	*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
PAH																	
Benzo(b+j+k)fluoranthene	mg/kg	1	*	*	*	*		-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Acenaphthylene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Anthracene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(a)anthracene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(a) pyrene	mg/kg	0.5	160	40	20	1		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(b+j)fluoranthene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Chrysene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Fluoranthene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Fluorene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Naphthalene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Phenanthrene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Pyrene	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<1.2	<0.5	-	<0.5	-	-	-
Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	*	*	*	*		0.6	0.6	0.6	1.4	0.6	-	0.6	-	-	-
Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	*	*	*	*		1.2	1.2	1.2	2.9	1.2	-	1.2	-	-	-
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	*	*	*	*		<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	-	-
PAHs (Sum of total)	mg/kg	0.5	400	100	50	20		<0.5	<0.5	<0.5	<0.7	<0.5	-	<0.5	-	-	-
PAHs (Vic EPA List)	mg/kg	0.5	400	100	50	20		-	-	-	-	-	-	-	-	-	-
Chlorinated Hydrocarbons																	
Chlorinated hydrocarbons EPAVic	mg/kg	0.01	*	*	*	1		-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.01	1,600	400	400	*		-	-	-	-	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.01	4,800	1,200	1,200	*		-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.02	210	52	52	*		-	-	-	-	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.04	190	48	48	*		-	-	-	-	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.01	480	120	120	*		-	-	-	-	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.02	48	12	12	*		-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.01	48	12	12	*		-	-	-	-	-	-	-	-	-	-
Chloroform	mg/kg	0.02	960	240	240	*		-	-	-	-	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.01	*	*	*	*		-	-	-	-	-	-	-	-	-	-
Dichloromethane	mg/kg	0.4	64	16	16	*		-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.02	11	2.8	2.8	*		-	-	-	-	-	-	-	-	-	-
Trichloroethene	mg/kg	0.02	80	20	20	*		-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	mg/kg	0.02	800	200	200	*		-	-	-	-	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.02	*	*	*	*		-	-	-	-	-	-	-	-	-	-
Vinyl chloride	mg/kg	0.02	4.8	1.2	1.2	*		-	-	-	-	-	-	-	-	-	-

Notes

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Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

						Sample Code	EM2211061019	EM2211061030	EM2211061031	EM2211061033	EM2211061036	EM2211061037	EM2211061039	EM2211061040	EM2211061042	EM2211061043
						Location	Shed Area									
						Field ID	BH07 - 0.1	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.1	0.5	0.1	0.1	0.5	0.1	0.5	0.1	0.5
						Matrix Type	FILL - Reworked CLAY	FILL - Clayey SLIT	NAT - CLAY with silt	FILL - Silty CLAY	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Gravel with silt	NAT - CLAY with silt
			EPA Vic IWRG1828.2[1]													
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill										
Halogenated Benzenes																
1,2,4-trichlorobenzene	mg/kg	0.01	*	*	*	*	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.02	24,000	6,000	6,000	*	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.02	640	160	160	*	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	mg/kg	0.02	4,800	1,200	1,200	*	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Herbicides																
2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
2,4,5-TP (Silvex)	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Hedonal	mg/kg	0.02	480	120	120	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
2,4-Dichlorprop	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
(2,4-DB)	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
4-Chlorophenoxy acetic acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Atrazine	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	-	-	<0.05	-	-	-
Clopyralid	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Dicamba	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Dinoseb	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Fluroxypyr	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Acid	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Mecoprop	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Triclopyr	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Metals																
Arsenic	mg/kg	5	2,000	500	500	20	<5	<5	8	<5	6	<5	<5	<5	<5	5
Barium	mg/kg	10	25,000	6,250	6,250	*	110	-	-	30	-	-	70	-	-	-
Beryllium	mg/kg	1	400	100	100	*	<1	-	-	<1	-	-	<1	-	-	-
Boron	mg/kg	50	60,000	15,000	15,000	*	<50	-	-	<50	-	-	<50	-	-	-
Cadmium	mg/kg	1	400	100	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2,000	500	500	1	<0.5	-	-	<0.5	-	-	<0.5	-	-	-
Chromium (III+VI)	mg/kg	2	*	*	*	*	17	16	31	10	11	18	12	20	14	25
Cobalt	mg/kg	2	*	*	*	*	19	-	-	3	-	-	4	-	-	-
Copper	mg/kg	5	20,000	5,000	5,000	100	19	9	16	9	12	8	11	7	15	10
Iron	%		*	*	*	*	2.58	-	3.91	-	-	-	-	-	-	-
Lead	mg/kg	5	6,000	1,500	1,500	300	8	40	12	32	52	7	141	6	16	10
Manganese	mg/kg	5	*	*	*	*	691	-	-	91	-	-	109	-	-	-
Mercury	mg/kg	0.1	300	75	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4,000	1,000	1,000	40	-	-	-	-	-	-	-	-	-	-
Nickel	mg/kg	2	12,000	3,000	3,000	60	**79**	14	45	6	7	22	8	15	**66**	23
Selenium	mg/kg	5	40,000	10,000	10,000	10	<5	-	-	<5	-	-	<5	-	-	-
Silver	mg/kg	2	720	180	180	10	-	-	-	-	-	-	-	-	-	-
Tin	mg/kg	5	*	*	*	50	-	-	-	-	-	-	-	-	-	-
Vanadium	mg/kg	5	*	*	*	*	16	-	-	24	-	-	21	-	-	-
Zinc	mg/kg	5	140,000	35,000	35,000	200	52	56	24	175	107	17	**321**	22	80	24

Notes
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mbgl - Meters Below Ground Level
LOR - Limit of Reporting
Shading indicates analyte exceeds the relevant trigger value (highest criterion applied).
< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed

Table A2 - Soil Analytical Results: Off-site Disposal

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

						Sample Code	EM2211061019	EM2211061030	EM2211061031	EM2211061033	EM2211061036	EM2211061037	EM2211061039	EM2211061040	EM2211061042	EM2211061043
						Location	Shed Area									
						Field ID	BH07 - 0.1	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.1	0.5	0.1	0.1	0.5	0.1	0.5	0.1	0.5
						Matrix Type	FILL - Reworked CLAY	FILL - Clayey SLIT	NAT - CLAY with silt	FILL - Silty CLAY	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Gravel with silt	NAT - CLAY with silt
			EPA Vic IWRG1828.2[1]													
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill										
Organic																
Total Organic Carbon	%		*	*	*	*	0.6	-	0.5	-	-	-	-	-	-	-
Organochlorine Pesticides																
Organochlorine pesticides EPAVic	mg/kg	0.03	*	*	*	1	-	-	-	-	-	-	-	-	-	-
4,4-DDE	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
a-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Aldrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Aldrin + Dieldrin	mg/kg	0.05	4.8	1.2	1.2	*	<0.05	-	-	<0.05	0.56	-	<0.05	-	-	-
b-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Chlordane	mg/kg	0.03	16	4	4	*	-	-	-	-	<0.05	-	-	-	-	-
Chlordane (cis)	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Chlordane (trans)	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
d-BHC	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
DDD	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
DDT	mg/kg	0.05	*	*	*	*	<0.2	-	-	<0.2	<0.2	-	<0.2	-	-	-
DDT+DDE+DDD	mg/kg	0.05	50	50	50	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Dieldrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	0.56	-	<0.05	-	-	-
Endosulfan	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endosulfan I	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endosulfan II	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endosulfan sulphate	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endrin	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endrin aldehyde	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Endrin ketone	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
g-BHC (Lindane)	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Heptachlor	mg/kg	0.03	4.8	1.2	1.2	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Heptachlor epoxide	mg/kg	0.03	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Methoxychlor	mg/kg	0.03	*	*	*	*	<0.2	-	-	<0.2	<0.2	-	<0.2	-	-	-
Toxaphene	mg/kg	2	*	*	*	*	<2	-	-	<2	-	-	<2	-	-	-
Inorganics																
Exchangeable Calcium Percent	%	0.2	*	*	*	*	38.0	-	13.2	-	-	-	-	-	-	-
Exchangeable Magnesium Percent	%	0.2	*	*	*	*	35.7	-	45.6	-	-	-	-	-	-	-
Exchangeable Potassium Percent	%	0.2	*	*	*	*	8.1	-	7.3	-	-	-	-	-	-	-
Exchangeable Sodium Percent	%	0.2	*	*	*	*	18.2	-	33.9	-	-	-	-	-	-	-
Magnesium/Potassium Ratio	-	0.2	*	*	*	*	4.4	-	6.3	-	-	-	-	-	-	-
Moisture Content	%	1	*	*	*	*	10.9	8.2	13.9	2.6	3.2	20.8	4.8	21.9	1.8	16.9
Exchangeable Calcium	meq/100g	0.2	*	*	*	*	4.7	-	3.9	-	-	-	-	-	-	-
Exchangeable Magnesium	meq/100g	0.2	*	*	*	*	4.4	-	13.4	-	-	-	-	-	-	-
Exchangeable Potassium	meq/100g	0.2	*	*	*	*	1.0	-	2.1	-	-	-	-	-	-	-
Exchangeable Sodium	meq/100g	0.2	*	*	*	*	2.2	-	10.0	-	-	-	-	-	-	-
Cation Exchange Capacity	meq/100g	0.2	*	*	*	*	12.4	-	29.5	-	-	-	-	-	-	-
Cyanide Total	mg/kg	1	10,000	2,500	2,500	50	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity (Lab)	µS/cm	1	*	*	*	*	615	-	1,560	-	-	-	-	-	-	-
Calcium/Magnesium Ratio	-	0.2	*	*	*	*	1.1	-	0.3	-	-	-	-	-	-	-
Fluoride	mg/kg	40	40,000	10,000	10,000	450	-	-	-	-	-	-	-	-	-	-
pH (Lab)	-	0.1	2-12.5	*	4-10	4-10	9.0	-	9.3	-	-	-	-	-	-	-
MAH																
[illegible] EPAVic	mg/kg	0.2	*	*	*	7	-	-	-	-	-	-	-	-	-	-
Styrene	mg/kg	0.5	480	120	120	*	-	-	-	-	-	-	-	-	-	-
Particulates																
Organic Matter	%	0.5	*	*	*	*	1.0	-	0.9	-	-	-	-	-	-	-
PCBs																
PCBs (Sum of total)	mg/kg	0.1	6	50	2	2	<0.1	-	-	<0.1	-	-	<0.1	-	-	-
Cyanides																
Cyanide (WAD)	mg/kg	1	*	*	*	*	<1	-	-	<1	-	-	<1	-	-	-

Notes
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Table A2 - Soil Analytical Results: Off-site Disposal

						Sample Code	EM2211061019	EM2211061030	EM2211061031	EM2211061033	EM2211061036	EM2211061037	EM2211061039	EM2211061040	EM2211061042	EM2211061043
						Location	Shed Area									
						Field ID	BH07 - 0.1	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5
						Date	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022	9/06/2022
						Depth	0.1	0.1	0.5	0.1	0.1	0.5	0.1	0.5	0.1	0.5
						Matrix Type	FILL - Reworked CLAY	FILL - Clayey SLIT	NAT - CLAY with silt	FILL - Silty CLAY	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Silty CLAY	NAT - CLAY with silt	FILL - Gravel with silt	NAT - CLAY with silt
			EPA Vic IWRG1828.2[1]													
Analyte	Unit	LOR	Cat B	Cat C	Cat D	Fill										
TRH																
C6-C10 Fraction (F1)	mg/kg	10	*	*	*	*	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6-C10 (F1 minus BTEX)	mg/kg	10	*	*	*	*	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 Fraction (F2)	mg/kg	50	*	*	*	*	<50	<50	<50	420	130	<50	<50	<50	<50	<50
>C10-C16 Fraction (F2 minus [illegible])	mg/kg	50	*	*	*	*	<50	<50	<50	420	130	<50	<50	<50	<50	<50
>C16-C34 Fraction (F3)	mg/kg	100	*	*	*	*	<100	<100	<100	2,800	3,320	<100	170	<100	<100	<100
>C34-C40 Fraction (F4)	mg/kg	100	*	*	*	*	<100	<100	<100	320	830	<100	<100	<100	<100	<100
>C10-C40 Fraction (Sum)	mg/kg	50	*	*	*	*	<50	<50	<50	3,540	4,280	<50	170	<50	<50	<50
Phenols																
3&4-Methylphenol (m&p-cresol)	mg/kg	1	*	*	*	*	<1	-	<1	<2	-	-	<1	-	<1	-
2,3,5,6-Tetrachlorophenol	mg/kg	0.03	*	*	*	*	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.05	64,000	16,000	16,000	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2,4,6-Trichlorophenol	mg/kg	0.05	320	80	80	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2,4-Dichlorophenol	mg/kg	0.03	3,200	800	800	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2,4-Dimethylphenol	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2,4-Dinitrophenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-	-
2,6-Dichlorophenol	mg/kg	0.03	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05	*	*	*	*	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	mg/kg	0.03	4,800	1,200	1,200	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2-Methylphenol	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
2-Nitrophenol	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
4,6-Dinitro-2-methylphenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	0.03	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
4-Nitrophenol	mg/kg	5	*	*	*	*	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.2	*	*	*	*	<2	-	<2	<2	-	-	<2	-	<2	-
Picloram	mg/kg	0.02	*	*	*	*	<0.02	-	-	<0.02	-	-	<0.04	-	-	-
Phenol	mg/kg	0.5	*	*	*	*	<0.5	-	<0.5	<1.2	-	-	<0.5	-	<0.5	-
Phenols (halogenated) EPAVic	mg/kg	0.03	*	*	*	1	-	-	-	-	-	-	-	-	-	-
Phenols (non-halogenated) EPAVic	mg/kg	1	2,200	560	560	60	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides																
Azinophos methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Bromophos-ethyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Carbophenothion	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Chlorfenvinphos	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Chlorpyrifos	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Chlorpyrifos-methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Diazinon	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Dichlorvos	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Dimethoate	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Ethion	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Fenthion	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Malathion	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Methyl parathion	mg/kg	0.2	*	*	*	*	<0.2	-	-	<0.2	<0.2	-	<0.2	-	-	-
Monocrotophos	mg/kg	0.2	*	*	*	*	<0.2	-	-	<0.2	<0.2	-	<0.2	-	-	-
Prothiofos	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Pesticides																
Bifenthrin	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	-	-	<0.05	-	-	-
Demeton-S-methyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Fenamiphos	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
Mirex	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	-	-	<0.05	-	-	-
Parathion	mg/kg	0.2	*	*	*	*	<0.2	-	-	<0.2	<0.2	-	<0.2	-	-	-
Pirimphos-ethyl	mg/kg	0.05	*	*	*	*	<0.05	-	-	<0.05	<0.05	-	<0.05	-	-	-
TPH																
C6-C9 Fraction	mg/kg	10	2,600	650	325	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10-C14 Fraction	mg/kg	50	*	*	*	*	<50	<50	<50	130	<50	<50	<50	<50	<50	<50
C15-C28 Fraction	mg/kg	100	*	*	*	*	<100	<100	<100	2,000	2,050	<100	<100	<100	<100	<100
C29-C36 Fraction	mg/kg	100	*	*	*	*	<100	<100	<100	1,160	1,570	<100	110	<100	<100	<100
C10-C36 Fraction (Sum)	mg/kg	50	40,000	10,000	5,000	1,000	<50	<50	<50	3,290	3,620	<50	110	<50	<50	<50

Notes

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< Result is less than the laboratory limit of reporting (LOR)
* No Relevant Criteria
- Analysis not performed

Table A3 - RPDs

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

			Sample Code	EM2211061019	EM2211061045		EM2211061019	31939-1	
			Field ID	BH07 - 0.1	FD01		BH07 - 0.1	FS01	
			Date	44721	44721		44721	44721	
			Depth (mbgl)	0.1	0.1		0.1	0.1	
			Matrix Type	FILL - Reworked CLAY	FILL - Reworked CLAY		FILL - Reworked CLAY	FILL - Reworked CLAY	
Analyte	**Unit**	**LOR**							
Acid Sulphate Soils									
pH (CaCl2)	-	0.1	8.2	-	-	8.2	-	-
Particle Size									
Clay in soils <2um	%	1	17	-	-	17	-	-
Density	g/cm3	0.01	2.69	-	-	2.69	-	-
Particulates									
Organic Matter	%	0.5	1.0	-	-	1.0	-	-
BTEX									
Naphthalene (VOC)	mg/kg	1	<1	-	-	<1	-	-
Benzene	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Toluene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Ethylbenzene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Xylene (m & p)	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Xylene (o)	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Xylene Total	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Total BTEX	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Cyanides									
Cyanide (WAD)	mg/kg	1	<1	-	-	<1	-	-
TRH									
C6-C10 Fraction (F1)	mg/kg	10	<10	-	-	<10	-	-
C6-C10 (F1 minus BTEX)	mg/kg	10	<10	-	-	<10	-	-
>C10-C16 Fraction (F2)	mg/kg	50	<50	-	-	<50	-	-
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg	50	<50	-	-	<50	-	-
>C16-C34 Fraction (F3)	mg/kg	100	<100	-	-	<100	-	-
>C34-C40 Fraction (F4)	mg/kg	100	<100	-	-	<100	-	-
>C10-C40 Fraction (Sum)	mg/kg	50	<50	-	-	<50	-	-
Phenols									
3&4-Methylphenol (m&p-cresol)	mg/kg	1	<1	-	-	<1	-	-
2,4,5-Trichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2,4,6-Trichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2,4-Dichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2,4-Dimethylphenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2,6-Dichlorophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2-Chlorophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2-Methylphenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
2-Nitrophenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
4-chloro-3-methylphenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Pentachlorophenol	mg/kg	2	<2	-	-	<2	-	-
Picloram	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Phenol	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Halogenated Benzenes									
Hexachlorobenzene	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Herbicides									
2,4,5-Trichlorophenoxy Acetic Acid	mg/kg	0.02	<0.02	-	-	<0.02	-	-
2,4,5-TP (Silvex)	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Hedonal	mg/kg	0.02	<0.02	-	-	<0.02	-	-
2,4-Dichlorprop	mg/kg	0.02	<0.02	-	-	<0.02	-	-
4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	mg/kg	0.02	<0.02	-	-	<0.02	-	-
4-Chlorophenoxy acetic acid	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Atrazine	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Clopyralid	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Dicamba	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Fluroxypyr	mg/kg	0.02	<0.02	-	-	<0.02	-	-
2-Methyl-4-chlorophenoxyacetic acid	mg/kg	0.02	<0.02	-	-	<0.02	-	-
2-Methyl-4-Chlorophenoxy Butanoic Acid	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Mecoprop	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Triclopyr	mg/kg	0.02	<0.02	-	-	<0.02	-	-
Inorganics									
Exchangeable Calcium Percent	%	0.2	38.0	-	-	38.0	-	-
Exchangeable Magnesium Percent	%	0.2	35.7	-	-	35.7	-	-
Exchangeable Potassium Percent	%	0.2	8.1	-	-	8.1	-	-
Exchangeable Sodium Percent	%	0.2	18.2	-	-	18.2	-	-
Magnesium/Potassium Ratio	-	0.2	4.4	-	-	4.4	-	-
Moisture Content	%	0.1	10.9	6.5	**51**	10.9	7.6	36
Exchangeable Calcium	meq/100g	0.2	4.7	-	-	4.7	-	-
Exchangeable Magnesium	meq/100g	0.2	4.4	-	-	4.4	-	-
Exchangeable Potassium	meq/100g	0.2	1.0	-	-	1.0	-	-
Exchangeable Sodium	meq/100g	0.2	2.2	-	-	2.2	-	-
Cation Exchange Capacity	meq/100g	0.2	12.4	-	-	12.4	-	-
Electrical Conductivity (Lab)	µS/cm	1	615	-	-	615	-	-
Calcium/Magnesium Ratio	-	0.2	1.1	-	-	1.1	-	-
pH (Lab)	-	0.1	9.0	-	-	9.0	-	-
Metals									
Arsenic	mg/kg	4	<5	<5	0	<5	<4	0
Barium	mg/kg	1	110	80	32	110	40	**93**
Beryllium	mg/kg	1	<1	<1	0	<1	<1	0
Boron	mg/kg	3	<50	<50	0	<50	7	0
Cadmium	mg/kg	0.4	<1	<1	0	<1	<0.4	0
Chromium (hexavalent)	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Chromium (III+VI)	mg/kg	1	17	23	30	17	17	0
Cobalt	mg/kg	1	19	18	5	19	18	5
Copper	mg/kg	1	19	16	17	19	19	0
Iron	%		2.58	-	-	2.58	-	-
Lead	mg/kg	1	8	20	**86**	8	9	12
Manganese	mg/kg	1	691	340	**68**	691	340	**68**
Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0
Nickel	mg/kg	1	79	69	14	79	68	15
Selenium	mg/kg	2	<5	<5	0	<5	<2	0
Vanadium	mg/kg	1	16	33	**69**	16	22	32
Zinc	mg/kg	1	52	81	44	52	48	8

Notes
LOR - Limit of Reporting
RPD - Relative Percentage Difference
<## Result is less than the LOR
- Analysis not performed
Grey shading indicates RPD exceedance (>50%)
*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 50 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

Table A3 - RPDs

Edge Project No.: 20220134
Preliminary Site Investigation
Urban Land Developments
Hopetoun Park Road, Hopetoun Park, VIC, 3340

	Sample Code		EM2211061019	EM2211061045		EM2211061019	31939-1	
	Field ID		BH07 - 0.1	FD01		BH07 - 0.1	FS01	
	Date		44721	44721		44721	44721	
	Depth (mbgl)		0.1	0.1		0.1	0.1	
	Matrix Type		FILL - Reworked CLAY	FILL - Reworked CLAY		FILL - Reworked CLAY	FILL - Reworked CLAY	
Analyte	**Unit**	**LOR**						
Acid Sulphate Soils								
pH (CaCl2)	-	0.1	8.2	-	-	8.2	-	-
Organic								
Total Organic Carbon	%		0.6	-	-	0.6	-	-
Organochlorine Pesticides								
4,4-DDE	mg/kg	0.05	<0.05	-	-	<0.05	-	-
a-BHC	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Aldrin	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Aldrin + Dieldrin	mg/kg	0.05	<0.05	-	-	<0.05	-	-
b-BHC	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Chlordane (cis)	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Chlordane (trans)	mg/kg	0.05	<0.05	-	-	<0.05	-	-
d-BHC	mg/kg	0.05	<0.05	-	-	<0.05	-	-
DDD	mg/kg	0.05	<0.05	-	-	<0.05	-	-
DDT	mg/kg	0.2	<0.2	-	-	<0.2	-	-
DDT+DDE+DDD	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Dieldrin	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endosulfan	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endosulfan I	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endosulfan II	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endosulfan sulphate	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endrin	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endrin aldehyde	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Endrin ketone	mg/kg	0.05	<0.05	-	-	<0.05	-	-
g-BHC (Lindane)	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Heptachlor	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Heptachlor epoxide	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Methoxychlor	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Toxaphene	mg/kg	2	<2	-	-	<2	-	-
Organophosphorous Pesticides								
Azinophos methyl	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Bromophos-ethyl	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Carbophenothion	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Chlorfenvinphos	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Chlorpyrifos	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Chlorpyrifos-methyl	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Diazinon	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Dichlorvos	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Dimethoate	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Ethion	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Fenthion	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Malathion	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Methyl parathion	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Monocrotophos	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Prothiofos	mg/kg	0.05	<0.05	-	-	<0.05	-	-
PAH								
Acenaphthene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Acenaphthylene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Anthracene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(a)anthracene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(a) pyrene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(g,h,i)perylene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(k)fluoranthene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Chrysene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Dibenz(a,h)anthracene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Fluoranthene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Fluorene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Naphthalene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Phenanthrene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Pyrene	mg/kg	0.5	<0.5	-	-	<0.5	-	-
Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	0.6	-	-	0.6	-	-
Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	-	-	1.2	-	-
Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	<0.5	-	-	<0.5	-	-
PAHs (Sum of total)	mg/kg	0.5	<0.5	-	-	<0.5	-	-
PCBs								
PCBs (Sum of total)	mg/kg	0.1	<0.1	-	-	<0.1	-	-
Pesticides								
Bifenthrin	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Demeton-S-methyl	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Fenamiphos	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Mirex	mg/kg	0.05	<0.05	-	-	<0.05	-	-
Parathion	mg/kg	0.2	<0.2	-	-	<0.2	-	-
Pirimphos-ethyl	mg/kg	0.05	<0.05	-	-	<0.05	-	-
TPH								
C6-C9 Fraction	mg/kg	10	<10	-	-	<10	-	-
C10-C14 Fraction	mg/kg	50	<50	-	-	<50	-	-
C15-C28 Fraction	mg/kg	100	<100	-	-	<100	-	-
C29-C36 Fraction	mg/kg	100	<100	-	-	<100	-	-
C10-C36 Fraction (Sum)	mg/kg	50	<50	-	-	<50	-	-

Notes
LOR - Limit of Reporting
RPD - Relative Percentage Difference
<## Result is less than the LOR
- Analysis not performed
Grey shading indicates RPD exceedance (>50%)
*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 50 (1 - 10 x EQL); 50 (10 - 30 x EQL); 50 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

Table A4 - Field Blanks

			Sample Code	EM2211061046	EM2211061047
			Field ID	RINS01	TRIP01
			Date	9/06/2022	9/06/2022
			Matrix Type	Water	Water
Analyte	Unit	LOR			
BTEX					
Naphthalene (VOC)	mg/L	0.005		-	<0.005
Benzene	µg/L	1		-	<1
Toluene	µg/L	2		-	<2
Ethylbenzene	µg/L	2		-	<2
Xylene (m & p)	µg/L	2		-	<2
Xylene (o)	µg/L	2		-	<2
Xylene Total	µg/L	2		-	<2
Total BTEX	µg/L	1		-	<1
TRH					
C6-C10 Fraction (F1)	µg/L	20		-	<20
C6-C10 (F1 minus BTEX)	µg/L	20		-	<20
>C10-C16 Fraction (F2)	µg/L	100		-	<100
>C10-C16 Fraction (F2 minus Naphthalene)	µg/L	100		-	<100
>C16-C34 Fraction (F3)	µg/L	100		-	<100
>C34-C40 Fraction (F4)	µg/L	100		-	<100
>C10-C40 Fraction (Sum)	µg/L	100		-	<100
Metals					
Arsenic	mg/L	0.001		<0.001	-
Barium	mg/L	0.001		<0.001	-
Beryllium	mg/L	0.001		<0.001	-
Boron	mg/L	0.05		<0.05	-
Cadmium	mg/L	0.0001		<0.0001	-
Chromium (III+VI)	mg/L	0.001		0.002	-
Cobalt	mg/L	0.001		<0.001	-
Copper	mg/L	0.001		<0.001	-
Lead	mg/L	0.001		<0.001	-
Manganese	mg/L	0.001		<0.001	-
Mercury	mg/L	0.0001		<0.0001	-
Nickel	mg/L	0.001		<0.001	-
Selenium	mg/L	0.01		<0.01	-
Vanadium	mg/L	0.01		<0.01	-
Zinc	mg/L	0.005		<0.005	-
TPH					
C6-C9 Fraction	µg/L	20		-	<20
C10-C14 Fraction	µg/L	50		-	<50
C15-C28 Fraction	µg/L	100		-	<100
C29-C36 Fraction	µg/L	50		-	<50
C10-C36 Fraction (Sum)	µg/L	50		-	<50
Notes					

- Not analysed
< - Sample is lower than limit of reporting

Site Specific EIL Calculation

Inputs
Select contaminant from list below
Cr_III
Below needed to calculate fresh and aged ACLs
Enter % clay (values from 0 to 100%)
17
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
or for aged ABCs only
Enter State (or closest State)
VIC
Enter traffic volume (high or low)
low

Outputs		
Land use	Cr III soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	#NUM!	160
Urban residential and open public spaces	#NUM!	480
Commercial and industrial	#NUM!	800

Site Specific EIL Calculation

Inputs
Select contaminant from list below
Cu
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
12.4
Enter soil pH (calcium chloride method) (values from 1 to 14)
8.2
Enter organic carbon content (%OC) (values from 0 to 50%)
0.6
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
or for aged ABCs only
Enter State (or closest State)
VIC
Enter traffic volume (high or low)
low

Outputs		
Land use	Cu soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	#NUM!	75
Urban residential and open public spaces	#NUM!	210
Commercial and industrial	#NUM!	300

Site Specific EIL Calculation

Inputs
Select contaminant from list below
Ni
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
12.4
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
or for aged ABCs only
Enter State (or closest State)
VIC
Enter traffic volume (high or low)
low

Outputs		
Land use	Ni soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	#NUM!	40
Urban residential and open public spaces	#NUM!	200
Commercial and industrial	#NUM!	340

Site Specific EIL Calculation

Inputs
Select contaminant from list below
Zn
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
12.4
Enter soil pH (calcium chloride method) (values from 1 to 14)
8.2
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
or for aged ABCs only
Enter State (or closest State)
VIC
Enter traffic volume (high or low)
low

Outputs		
Land use	Zn soil-specific EILs (mg contaminant/kg dry soil)	
	Fresh	Aged
National parks and areas of high conservation value	#NUM!	140
Urban residential and open public spaces	#NUM!	520
Commercial and industrial	#NUM!	780

1	**UCL Statistics for Uncensored Full Data Sets**											
2												
3	User Selected Options											
4	Date/Time of Computation	ProUCL 5.130/06/2022 2:49:09 PM										
5	From File	WorkSheet.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Number of Bootstrap Operations	2000										
9												
10												
11	**TRH F2 at Sheds, 0.1 and 0.5 m samples**											
12												
13	**General Statistics**											
14	Total Number of Observations	10					Number of Distinct Observations	3				
15							Number of Missing Observations	0				
16	Minimum	50					Mean	95				
17	Maximum	420					Median	50				
18	SD	116.9					Std. Error of Mean	36.98				
19	Coefficient of Variation	1.231					Skewness	2.923				
20												
21	**Normal GOF Test**											
22	Shapiro Wilk Test Statistic	0.463					**Shapiro Wilk GOF Test**					
23	5% Shapiro Wilk Critical Value	0.842					Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic	0.45					**Lilliefors GOF Test**					
25	5% Lilliefors Critical Value	0.262					Data Not Normal at 5% Significance Level					
26	**Data Not Normal at 5% Significance Level**											
27												
28	**Assuming Normal Distribution**											
29	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
30	95% Student's-t UCL	162.8					95% Adjusted-CLT UCL (Chen-1995)	192.3				
31							95% Modified-t UCL (Johnson-1978)	168.5				
32												
33	**Gamma GOF Test**											
34	A-D Test Statistic	2.491					**Anderson-Darling Gamma GOF Test**					
35	5% A-D Critical Value	0.738					Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic	0.481					**Kolmogorov-Smirnov Gamma GOF Test**					
37	5% K-S Critical Value	0.271					Data Not Gamma Distributed at 5% Significance Level					
38	**Data Not Gamma Distributed at 5% Significance Level**											
39												
40	**Gamma Statistics**											
41	k hat (MLE)	1.646					k star (bias corrected MLE)	1.219				
42	Theta hat (MLE)	57.71					Theta star (bias corrected MLE)	77.93				
43	nu hat (MLE)	32.93					nu star (bias corrected)	24.38				
44	MLE Mean (bias corrected)	95					MLE Sd (bias corrected)	86.04				
45							Approximate Chi Square Value (0.05)	14.14				
46	Adjusted Level of Significance	0.0267					Adjusted Chi Square Value	12.8				
47												
48	**Assuming Gamma Distribution**											
49	95% Approximate Gamma UCL (use when n>=50))	163.8					95% Adjusted Gamma UCL (use when n<50)	180.9				
50												
51	**Lognormal GOF Test**											
52	Shapiro Wilk Test Statistic	0.525					**Shapiro Wilk Lognormal GOF Test**					
53	5% Shapiro Wilk Critical Value	0.842					Data Not Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic	0.469					**Lilliefors Lognormal GOF Test**					
55	5% Lilliefors Critical Value	0.262					Data Not Lognormal at 5% Significance Level					
56	**Data Not Lognormal at 5% Significance Level**											
57												

58	**Lognormal Statistics**											
59					Minimum of Logged Data	3.912				Mean of logged Data	4.22	
60					Maximum of Logged Data	6.04				SD of logged Data	0.706	
61												
62	**Assuming Lognormal Distribution**											
63					95% H-UCL	159				90% Chebyshev (MVUE) UCL	143.5	
64					95% Chebyshev (MVUE) UCL	170				97.5% Chebyshev (MVUE) UCL	206.9	
65					99% Chebyshev (MVUE) UCL	279.3						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data do not follow a Discernible Distribution (0.05)**											
69												
70	**Nonparametric Distribution Free UCLs**											
71					95% CLT UCL	155.8				95% Jackknife UCL	162.8	
72					95% Standard Bootstrap UCL	N/A				95% Bootstrap-t UCL	N/A	
73					95% Hall's Bootstrap UCL	N/A				95% Percentile Bootstrap UCL	N/A	
74					95% BCA Bootstrap UCL	N/A						
75					90% Chebyshev(Mean, Sd) UCL	205.9				95% Chebyshev(Mean, Sd) UCL	256.2	
76					97.5% Chebyshev(Mean, Sd) UCL	325.9				99% Chebyshev(Mean, Sd) UCL	462.9	
77												
78	**Suggested UCL to Use**											
79					95% Chebyshev (Mean, Sd) UCL	256.2						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.11/07/2022 11:34:40 AM
From File	WorkSheet_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

TRH F3 at Sheds, 0.1 and 0.5 m samples

General Statistics

Total Number of Observations	10	Number of Distinct Observations	4
		Number of Missing Observations	0
Minimum	100	Mean	699
Maximum	3320	Median	100
SD	1251	Std. Error of Mean	395.5
Coefficient of Variation	1.789	Skewness	1.82

Normal GOF Test

Shapiro Wilk Test Statistic	0.538	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.842	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.464	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.262	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	1424	95% Adjusted-CLT UCL (Chen-1995)	1593
		95% Modified-t UCL (Johnson-1978)	1462

Gamma GOF Test

A-D Test Statistic	2.368	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.775	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.432	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.28	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.522	k star (bias corrected MLE)	0.432
Theta hat (MLE)	1338	Theta star (bias corrected MLE)	1617
nu hat (MLE)	10.45	nu star (bias corrected)	8.646
MLE Mean (bias corrected)	699	MLE Sd (bias corrected)	1063
		Approximate Chi Square Value (0.05)	3.114
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	2.566

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	1940	95% Adjusted Gamma UCL (use when n<50)	2355

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.569	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.842	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.398	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.262	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

	A	B	C	D	E	F	G	H	I	J	K	L
58	**Lognormal Statistics**											
59					Minimum of Logged Data	4.605				Mean of logged Data		5.342
60					Maximum of Logged Data	8.108				SD of logged Data		1.423
61												
62	**Assuming Lognormal Distribution**											
63					95% H-UCL	3888				90% Chebyshev (MVUE) UCL		1183
64					95% Chebyshev (MVUE) UCL	1498				97.5% Chebyshev (MVUE) UCL		1936
65					99% Chebyshev (MVUE) UCL	2795						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data do not follow a Discernible Distribution (0.05)**											
69												
70	**Nonparametric Distribution Free UCLs**											
71					95% CLT UCL	1349				95% Jackknife UCL		1424
72					95% Standard Bootstrap UCL	N/A				95% Bootstrap-t UCL		N/A
73					95% Hall's Bootstrap UCL	N/A				95% Percentile Bootstrap UCL		N/A
74					95% BCA Bootstrap UCL	N/A						
75					90% Chebyshev(Mean, Sd) UCL	1885				95% Chebyshev(Mean, Sd) UCL		2423
76					97.5% Chebyshev(Mean, Sd) UCL	3169				99% Chebyshev(Mean, Sd) UCL		4634
77												
78	**Suggested UCL to Use**											
79					95% Chebyshev (Mean, Sd) UCL	2423						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	Recommendations are based upon data size, data distribution, and skewness.											
83	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
84	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
85												

Appendix B – Lotsearch Report

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 22 Apr 2022 08:27:58

Reference: LS031410 EP

Address: 124 Hopetoun Park, Hopetoun Park, VIC 3188

Dataset Listing

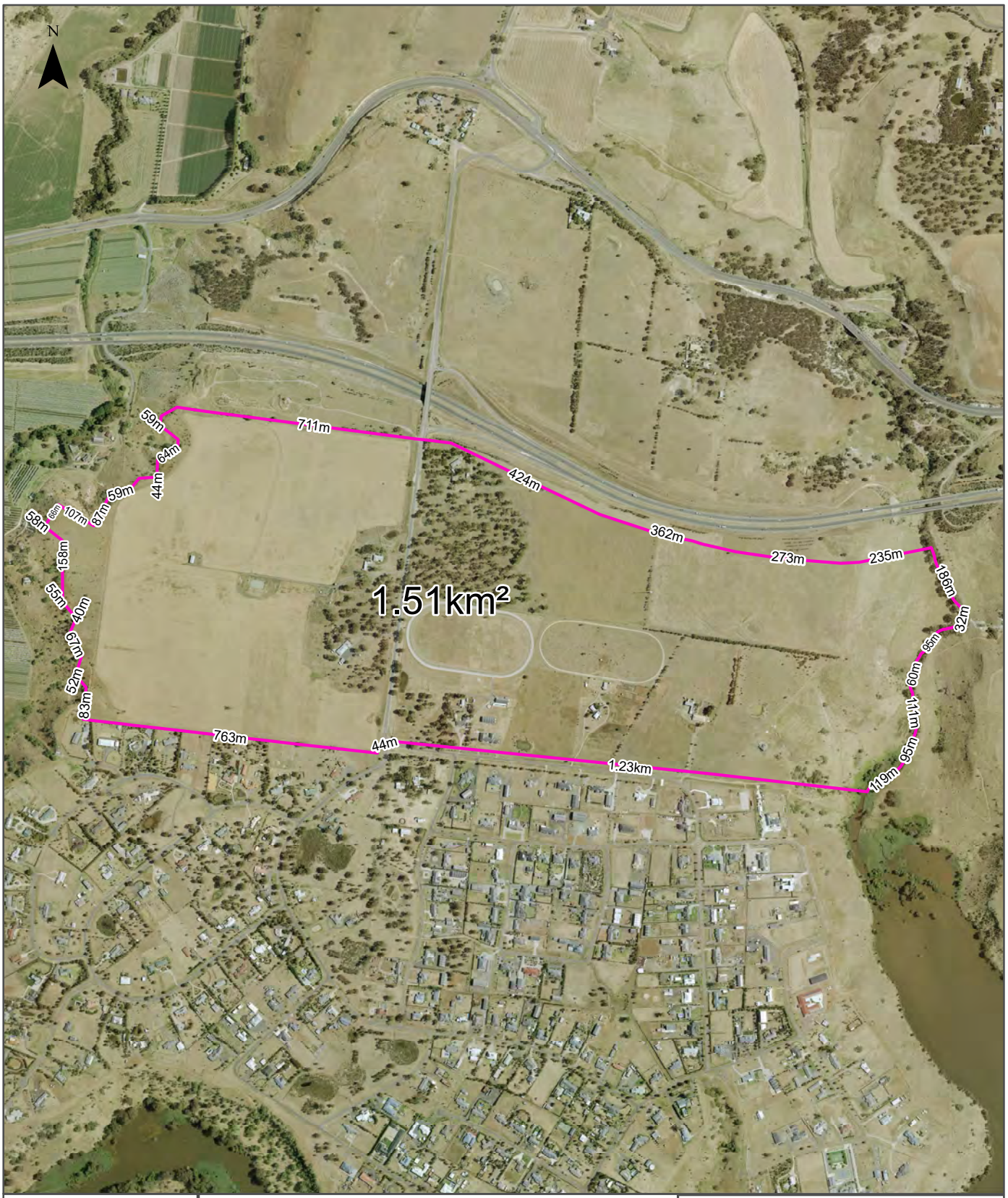
Datasets contained within this report, detailing their source and data currency:

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	28/01/2022	28/01/2022	Monthly	-	-	-	-
Current EPA Priority Sites	Environment Protection Authority (Vic)	19/04/2022	28/02/2022	Monthly	1000m	0	0	0
Former EPA Priority Sites & other Remedial Notices	Environment Protection Authority (Vic)	04/10/2021	01/09/2021	Monthly	1000m	0	0	0
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	06/04/2022	06/04/2022	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	06/04/2022	06/04/2022	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	06/04/2022	06/04/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	03/03/2022	03/03/2022	Quarterly	2000m	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	21/03/2022	21/03/2022	Monthly	1000m	0	0	0
EPA Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	23/03/2022	23/03/2022	Monthly	1000m	0	0	0
Current EPA Licensed Activities	Environment Protection Authority (Vic)	21/03/2022	22/07/2021	Monthly	1000m	0	0	0
Former EPA Licensed Activities	Environment Protection Authority (Vic)	21/03/2022	26/11/2021	Monthly	1000m	0	0	0
EPA Works Approvals	Environment Protection Authority (Vic)	28/03/2022	28/03/2022	Monthly	1000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	12/05/2021	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	6
EPA Victorian Landfill Register	Environment Protection Authority (Vic)	31/01/2022	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	15/02/2021	15/03/2012	Annually	1000m	0	0	0
Historical Business Directories (Premise & Intersection Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	150m	0	0	0
Historical Business Directories (Road & Area Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	150m	-	0	0
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	-	0	0
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	29/09/2021	29/09/2021	Quarterly	1000m	2	4	15
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000m	1	1	1
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	5	-	-
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	0	0	35
Groundwater Boreholes Earth Resources Database	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	20/05/2021	17/02/2010	Annually	2000m	0	0	22
Groundwater Boreholes Fed Uni	Federation University Australia	21/12/2017	07/01/2014	As required	2000m	0	0	16
Historical Mining Activity - Shafts	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	11/05/2021	11/05/2021	Annually	1000m	0	0	1
Geological Units 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000m	6	7	7
Geological Structures 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000m	0	0	3
Dykes and Marker Beds 50k	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	1	3
Victorian Soil Type Mapping	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	24/08/2017	21/03/2016	Unknown	1000m	3	5	6
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	1	1	3
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	10/02/2022	02/02/2022	Monthly	1000m	1	5	13
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	10/02/2022	02/02/2022	Monthly	1000m	3	10	37
Commonwealth Heritage List	Australian Government Department of Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	0
Victorian Heritage Register	State Government Victoria - Department of Environment, Land, Water & Planning	05/08/2021	05/08/2021	Quarterly	1000m	0	0	4
Cultural Heritage Sensitivity	State Government Victoria - Department of Premier and Cabinet	29/09/2021	29/09/2021	Quarterly	1000m	5	7	30
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	05/08/2021	06/07/2021	Quarterly	1000m	2	2	2
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	15/11/2021	15/11/2021	Quarterly	1000m	1	1	1
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	11/08/2021	05/02/2018	Quarterly	1000m	1	2	2
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	5	9
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	5	6	16
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	7	10	21

Site Diagram

124 Hopetoun Park, Hopetoun Park, VIC 3188



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 1.51km²

Total Perimeter: 6.05km

Scale: 0 75 150 300 450 600 750 Meters

Data Source Aerial Imagery:
© Aerometrex Pty Ltd

Disclaimers:

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

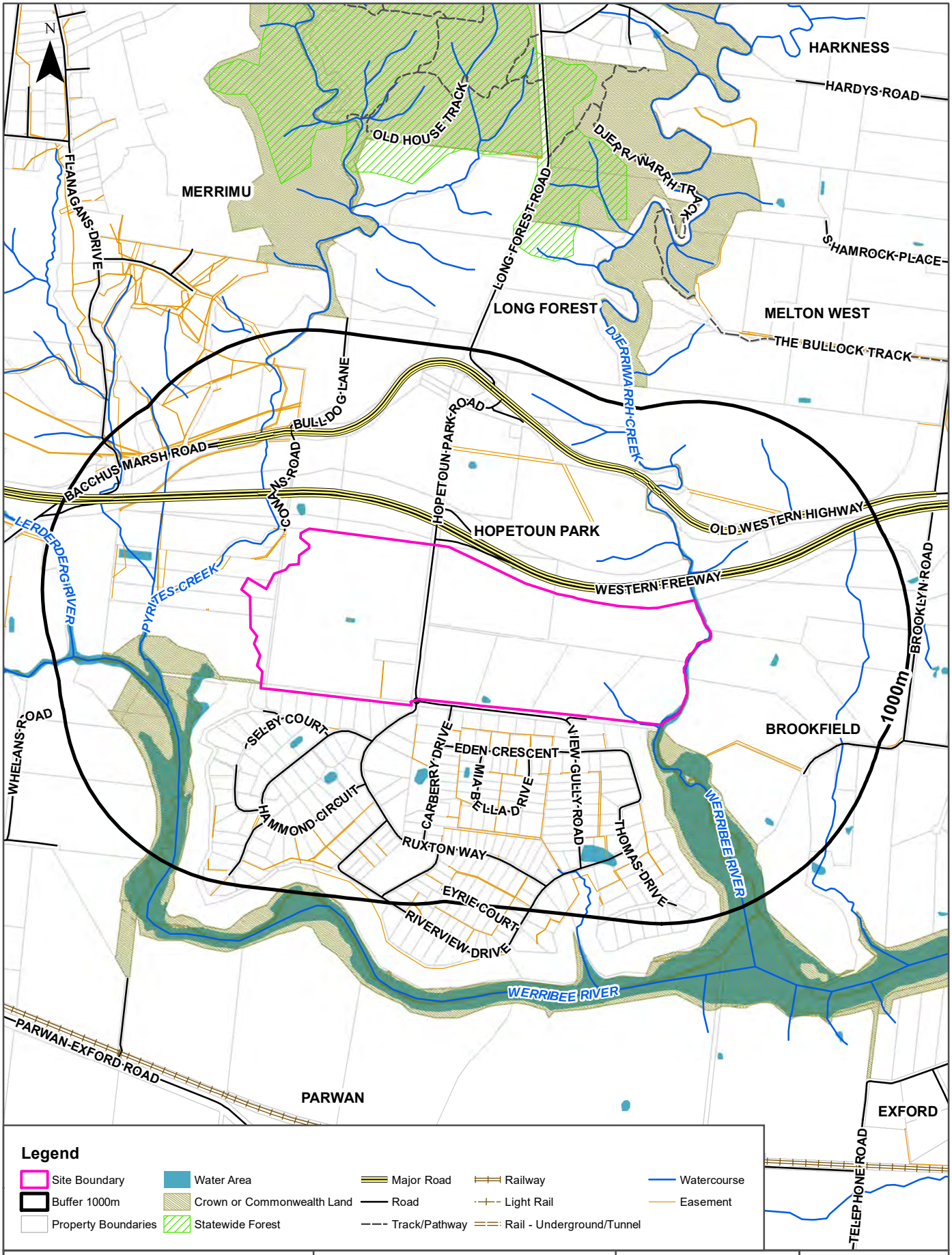
Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Coordinate System:
GDA 1994 MGA Zone 55

Date: 22 April 2022

Topographic Data

124 Hopetoun Park, Hopetoun Park, VIC 3188



Elevation Contours (m AHD)

124 Hopetoun Park, Hopetoun Park, VIC 3188

EPA Priority Sites & Pollution Notices

124 Hopetoun Park, Hopetoun Park, VIC 3188

Current EPA Priority Sites Register

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

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

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

Former EPA Priority Sites & Other Pollution Notices

Sites within the dataset buffer that have been issued a Pollution Notice:
Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

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

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

PFAS Investigation & Management Programs

124 Hopetoun Park, Hopetoun Park, VIC 3188

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

124 Hopetoun Park, Hopetoun Park, VIC 3188

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

124 Hopetoun Park, Hopetoun Park, VIC 3188

EPA Environmental Audits

EPA environmental audit records that exist within the dataset buffer:
Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

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

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

EPA Records

124 Hopetoun Park, Hopetoun Park, VIC 3188

EPA Groundwater Zones with Restricted Uses

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

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

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

EPA Activities

124 Hopetoun Park, Hopetoun Park, VIC 3188

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

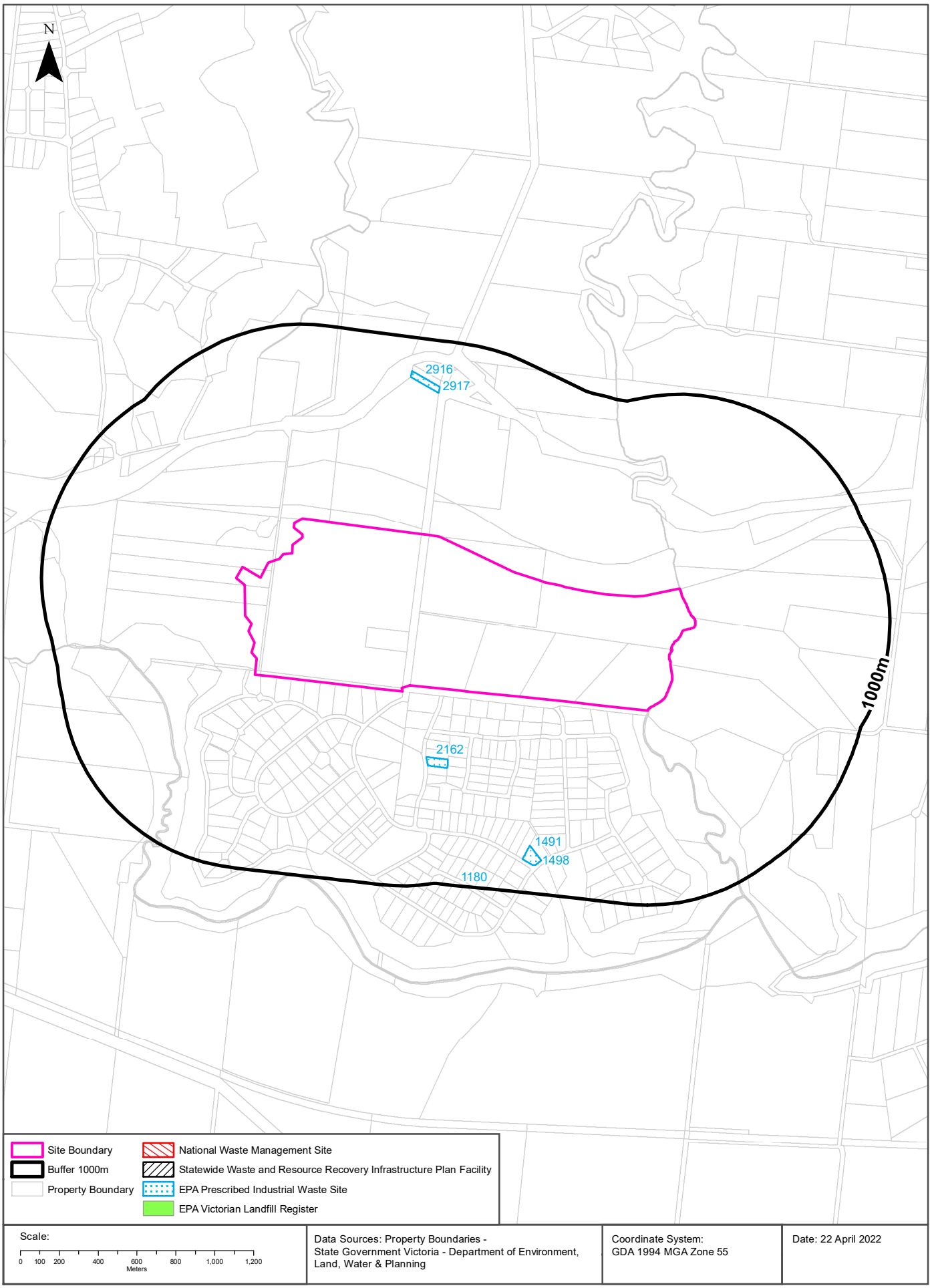
EPA works approvals that exist within the dataset buffer:

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

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

Waste Management Facilities and Landfills

124 Hopetoun Park, Hopetoun Park, VIC 3188



Waste Management Facilities & Landfills

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
2162	WOLF (VIC) PTY LTD	16 CARBERRY DR	HOPETOUN PARK VIC 3340	No	Yes	No	Current EPA List	Premise Match	357m	South
2916	NOTMAN, BRUCE	24 HOPETOUN PARK RD	HOPETOUN PARK VIC 3340	No	Yes	No	Current EPA List	Premise Match	735m	North
2917	NOTMAN, LEIGH [HOPETOUN]	24 HOPETOUN PARK RD	HOPETOUN PARK VIC 3340	No	Yes	No	Current EPA List	Premise Match	735m	North
1498	JAHEW PTY LTD	35 RUXTON WAY	HOPETOUN PARK VIC 3340	No	Yes	No	Current EPA List	Premise Match	756m	South
1491	DIACONO, PAUL	35 RUXTON WAY	HOPETOUN PARK VIC 3340	No	Yes	No	Previous EPA List	Premise Match	756m	South
1180	JRT EARTHMOVING PTY LTD	7 EYRIE CT	HOPETOUN PARK VIC 3340	No	Yes	No	Previous EPA List	Premise Match	996m	South

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

Waste Management Facilities & Landfills

124 Hopetoun Park, Hopetoun Park, VIC 3188

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 and Liquid Fuel Facilities

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
N/A	No records in buffer										

National Liquid Fuel Facilities Data Source: Geoscience Australia

Historical Business Directories

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
N/A	No records in buffer						

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
N/A	No records in buffer					

Historical Business Directories

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
N/A	No records in buffer					

Aerial Imagery 2021

124 Hopetoun Park, Hopetoun Park, VIC 3188

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 22 April 2022
0 180 360 540 720 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 55	

Aerial Imagery 2017

124 Hopetoun Park, Hopetoun Park, VIC 3188

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 22 April 2022
0 180 360 540 720 Meters	© Aerometrex Pty Ltd	GDA 1994 MGA Zone 55	

Aerial Imagery 2014

124 Hopetoun Park, Hopetoun Park, VIC 3188

Scale:
0 190 380 570 760
Meters

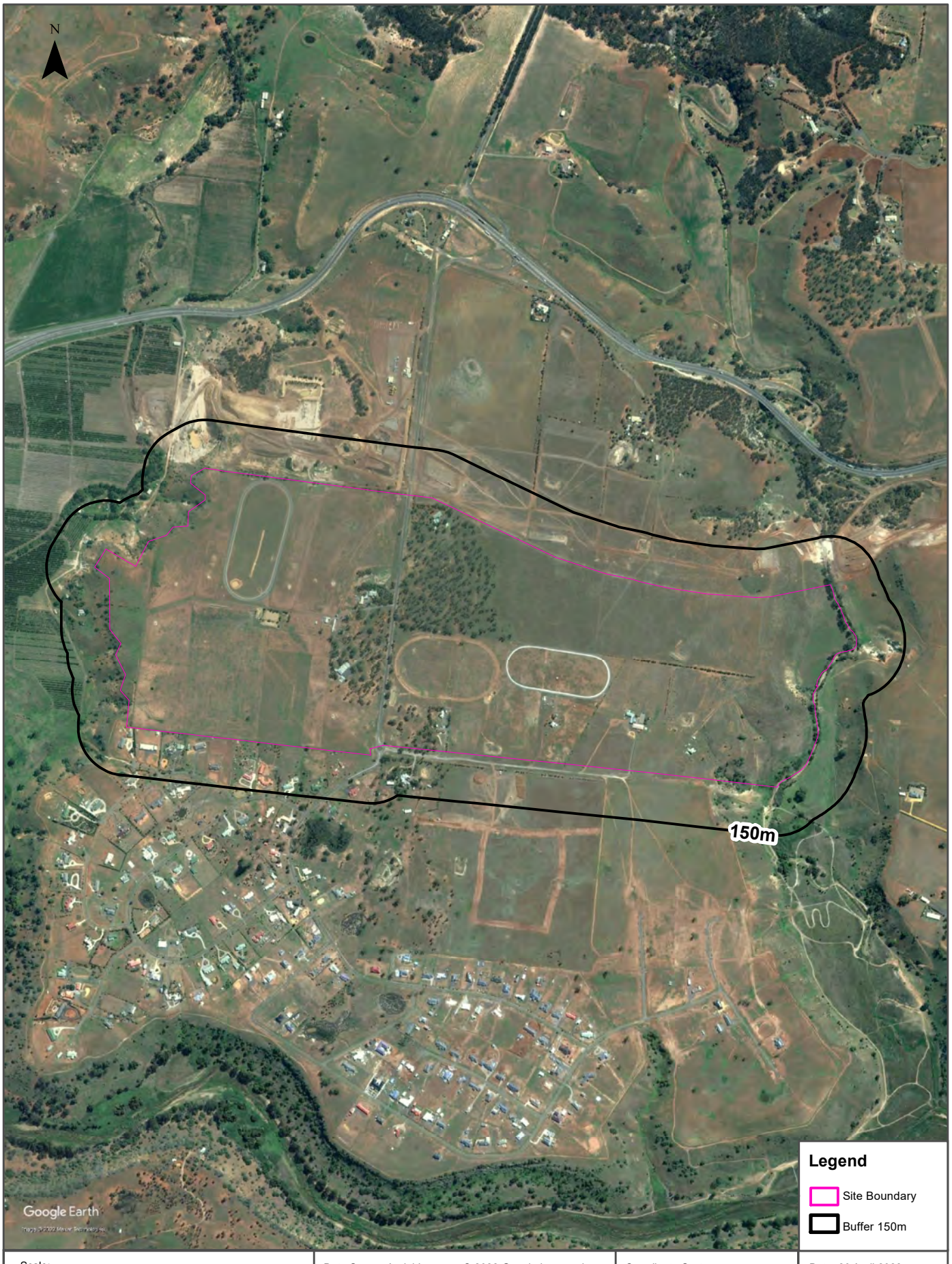
Data Source Aerial Imagery: © 2022 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.

Coordinate System:
GDA 1994 MGA Zone 55

Date: 20 April 2022

Aerial Imagery 2010

124 Hopetoun Park, Hopetoun Park, VIC 3188



Scale:
0 190 380 760
Meters

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Coordinate System:
GDA 1994 MGA Zone 55

Date: 20 April 2022

Aerial Imagery 2006

124 Hopetoun Park, Hopetoun Park, VIC 3188

Scale:	Data Source Aerial Imagery: © 2022 Google Inc, used with permission. Google and the Google logo are registered trademarks of Google Inc.	Coordinate System: GDA 1994 MGA Zone 55	Date: 20 April 2022

0 190 380 570 760
Meters

Aerial Imagery 1990

124 Hopetoun Park, Hopetoun Park, VIC 3188

Data Source Aerial Imagery:
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(Vicmap Topographic Mapping Program)

Coordinate System:
GDA 1994 MGA Zone 55

Date: 20 April 2022

Aerial Imagery 1985

124 Hopetoun Park, Hopetoun Park, VIC 3188

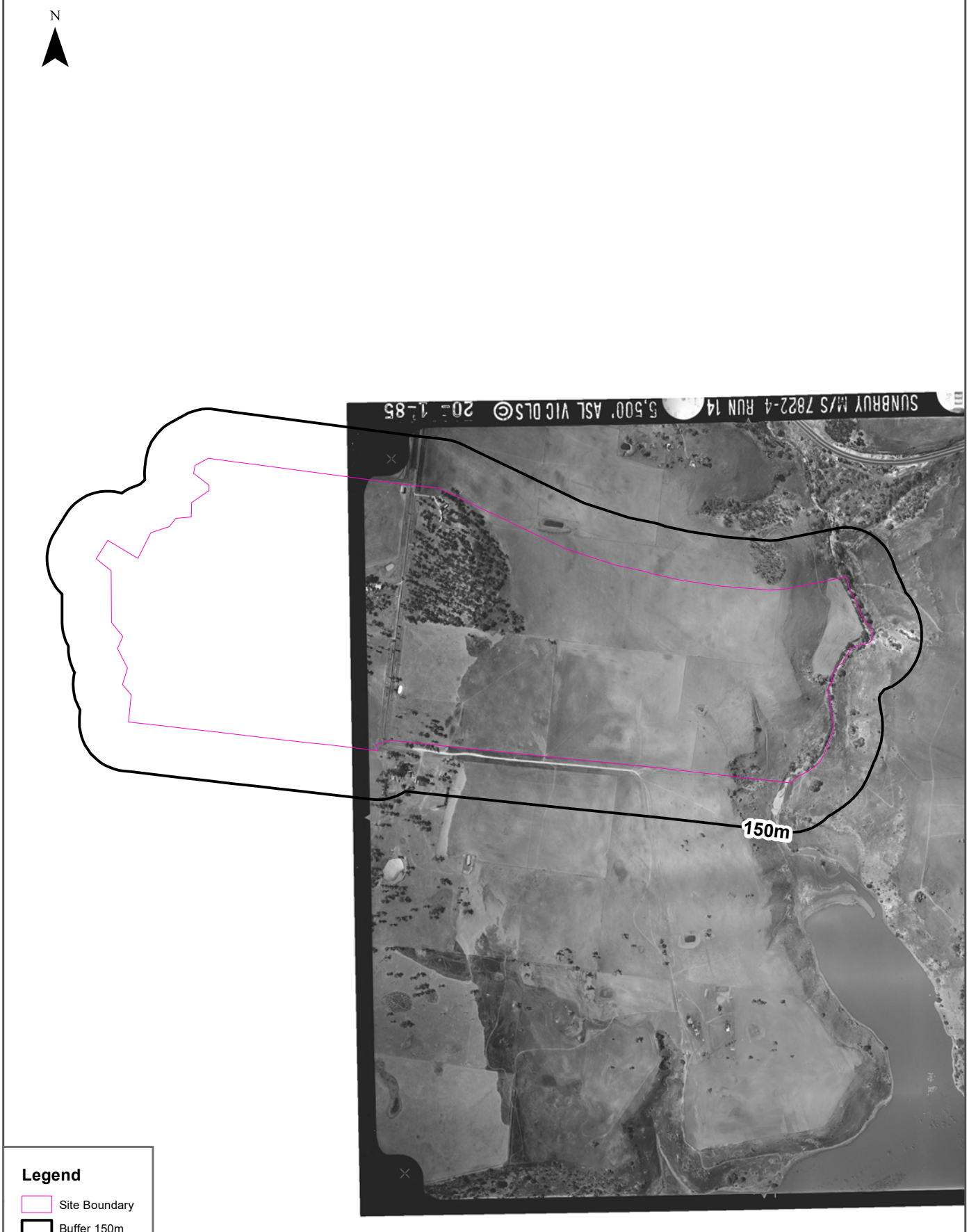
Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 21 April 2022
0 190 380 760 570 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1985

124 Hopetoun Park, Hopetoun Park, VIC 3188

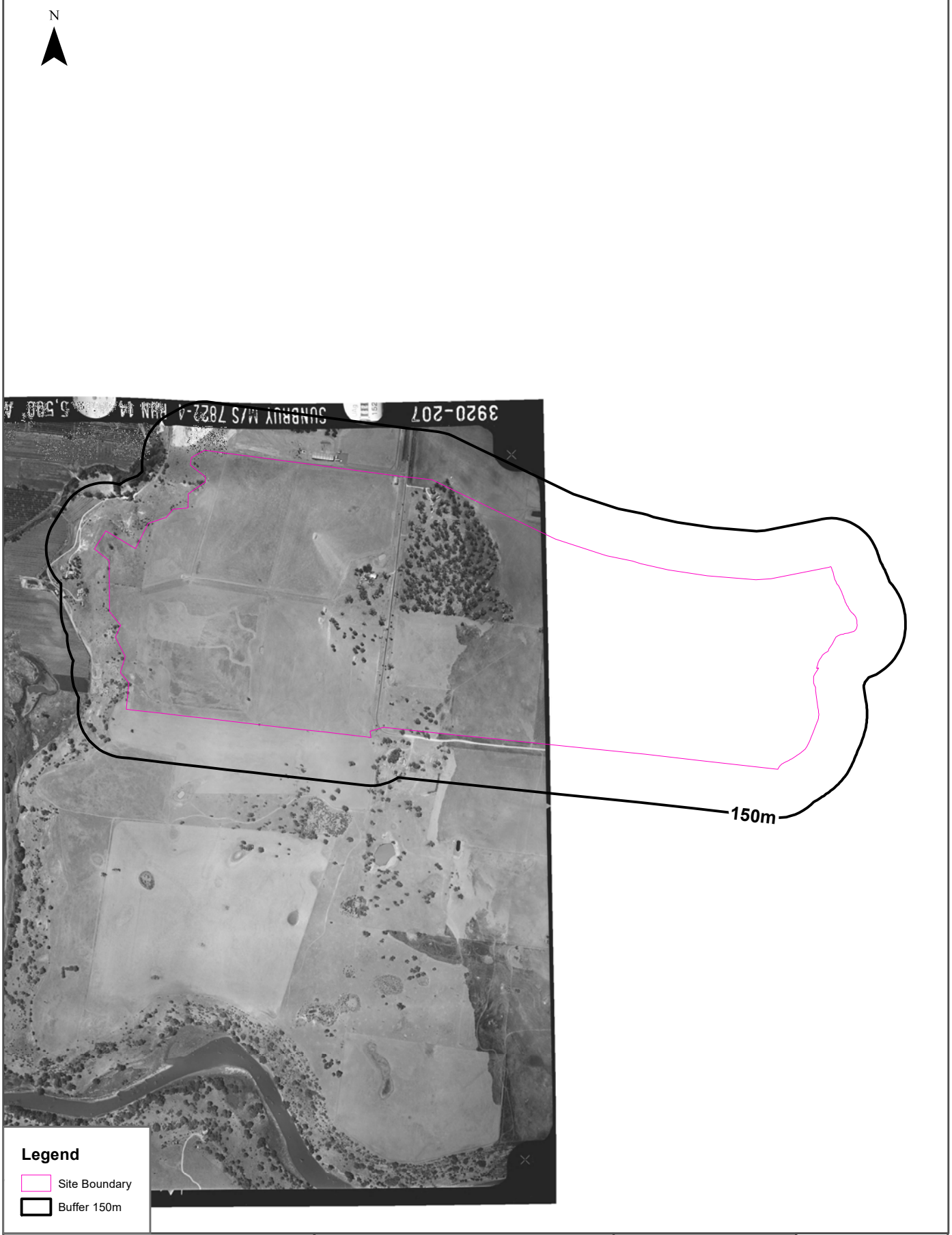


Aerial Imagery 1985

124 Hopetoun Park, Hopetoun Park, VIC 3188

Aerial Imagery 1985

124 Hopetoun Park, Hopetoun Park, VIC 3188



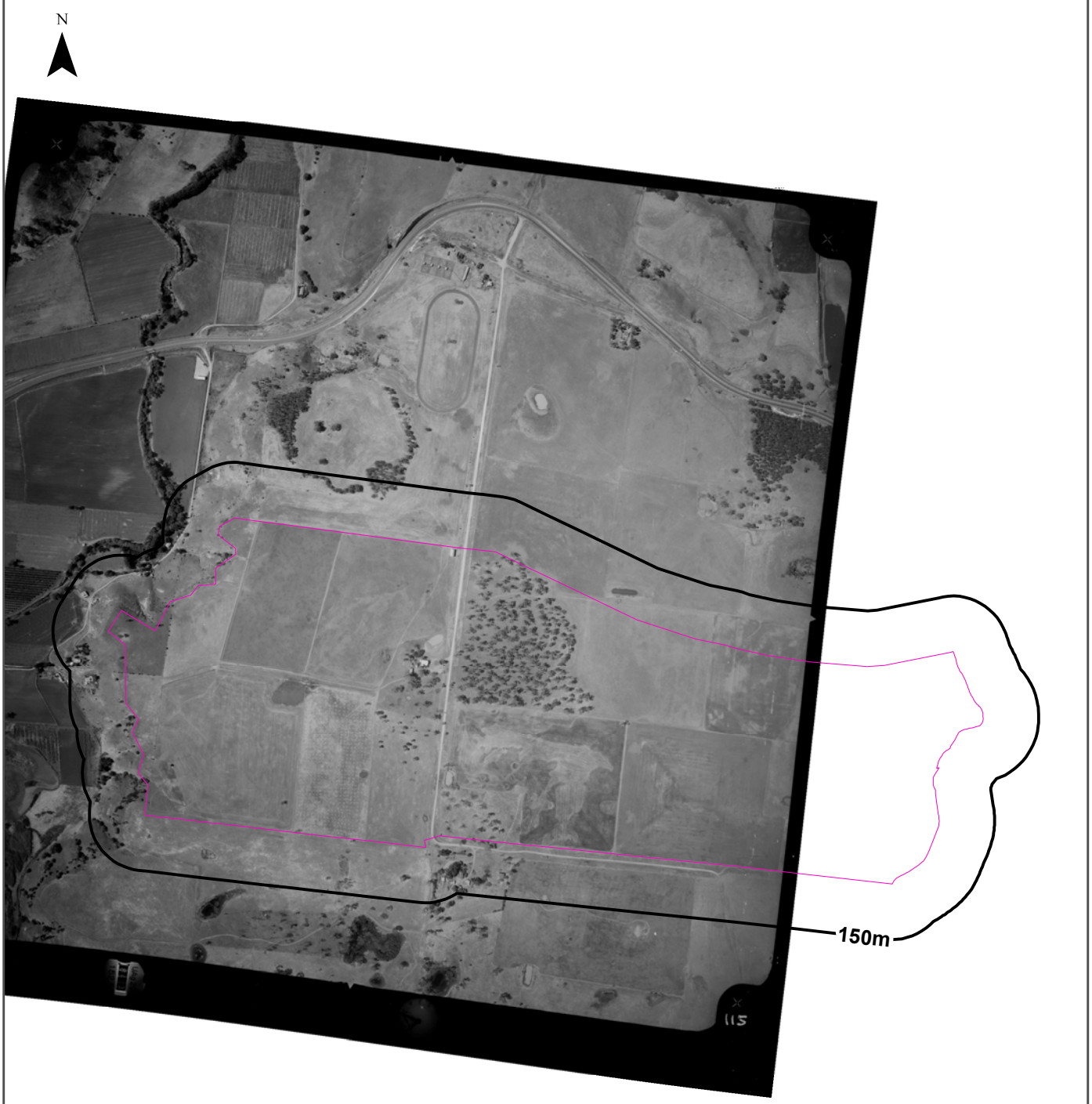
Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 21 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1978

124 Hopetoun Park, Hopetoun Park, VIC 3188

Aerial Imagery 1975

124 Hopetoun Park, Hopetoun Park, VIC 3188



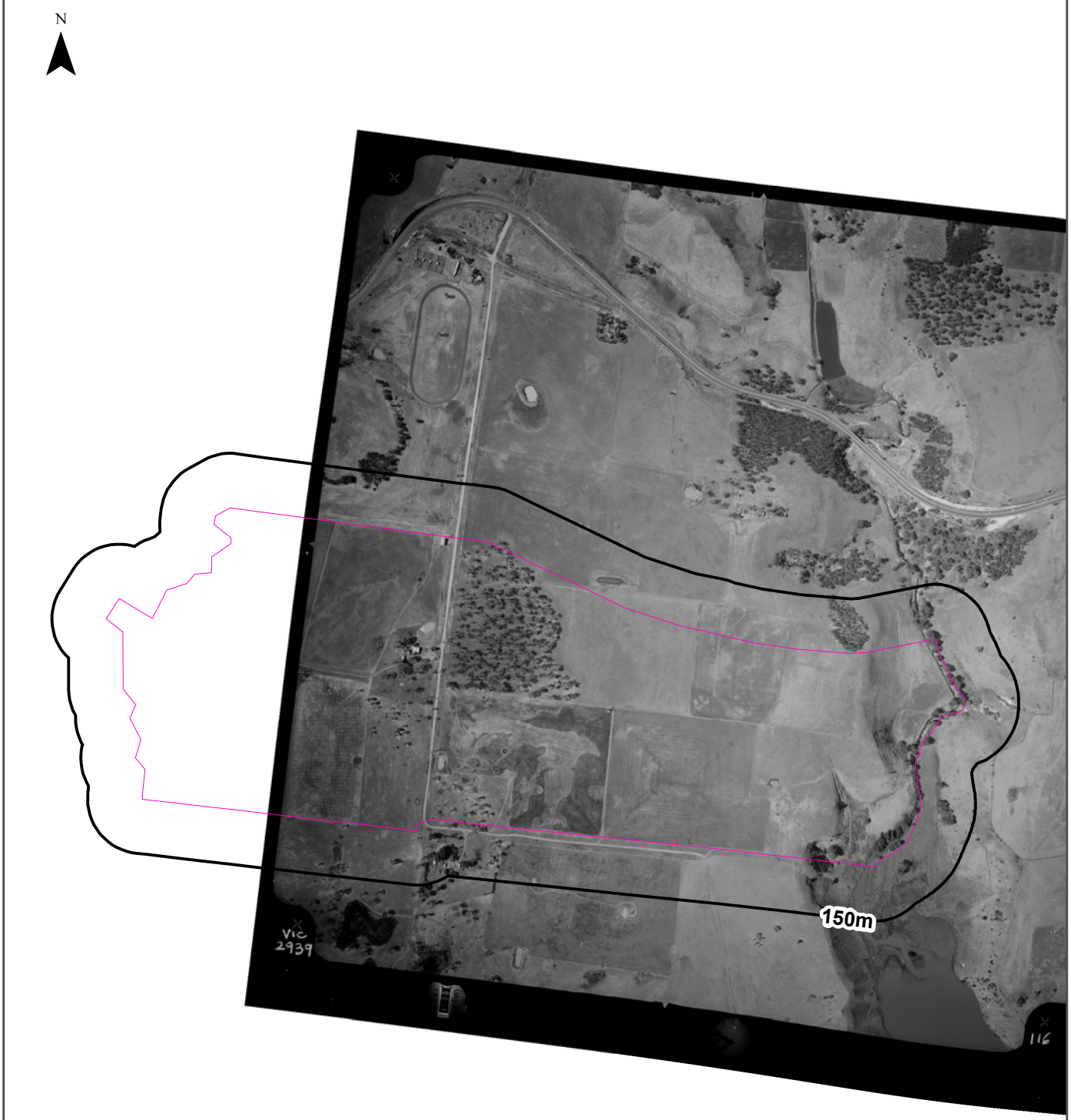
Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 20 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1975

124 Hopetoun Park, Hopetoun Park, VIC 3188



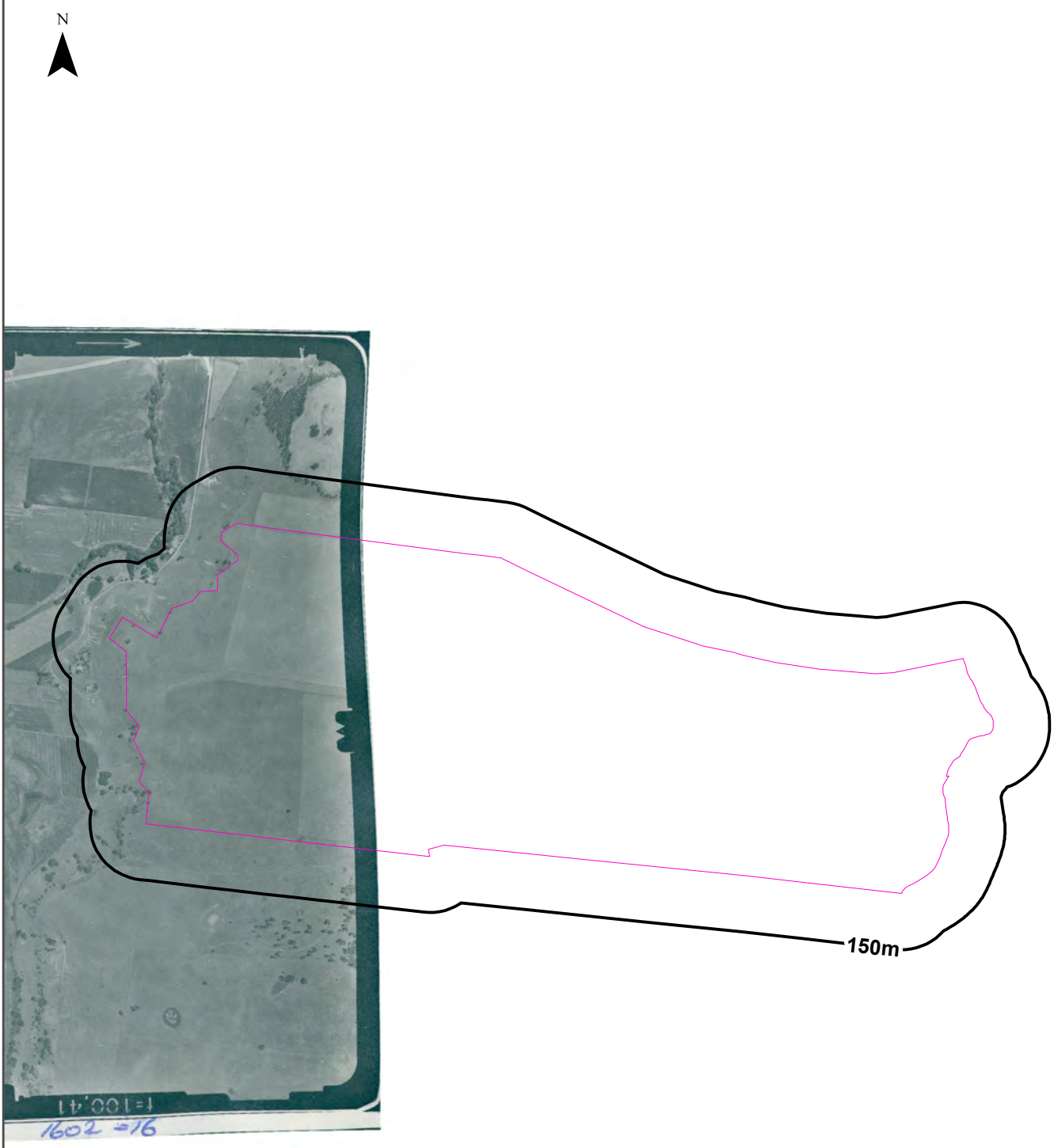
Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 20 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1961

124 Hopetoun Park, Hopetoun Park, VIC 3188



Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 27 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1961

124 Hopetoun Park, Hopetoun Park, VIC 3188

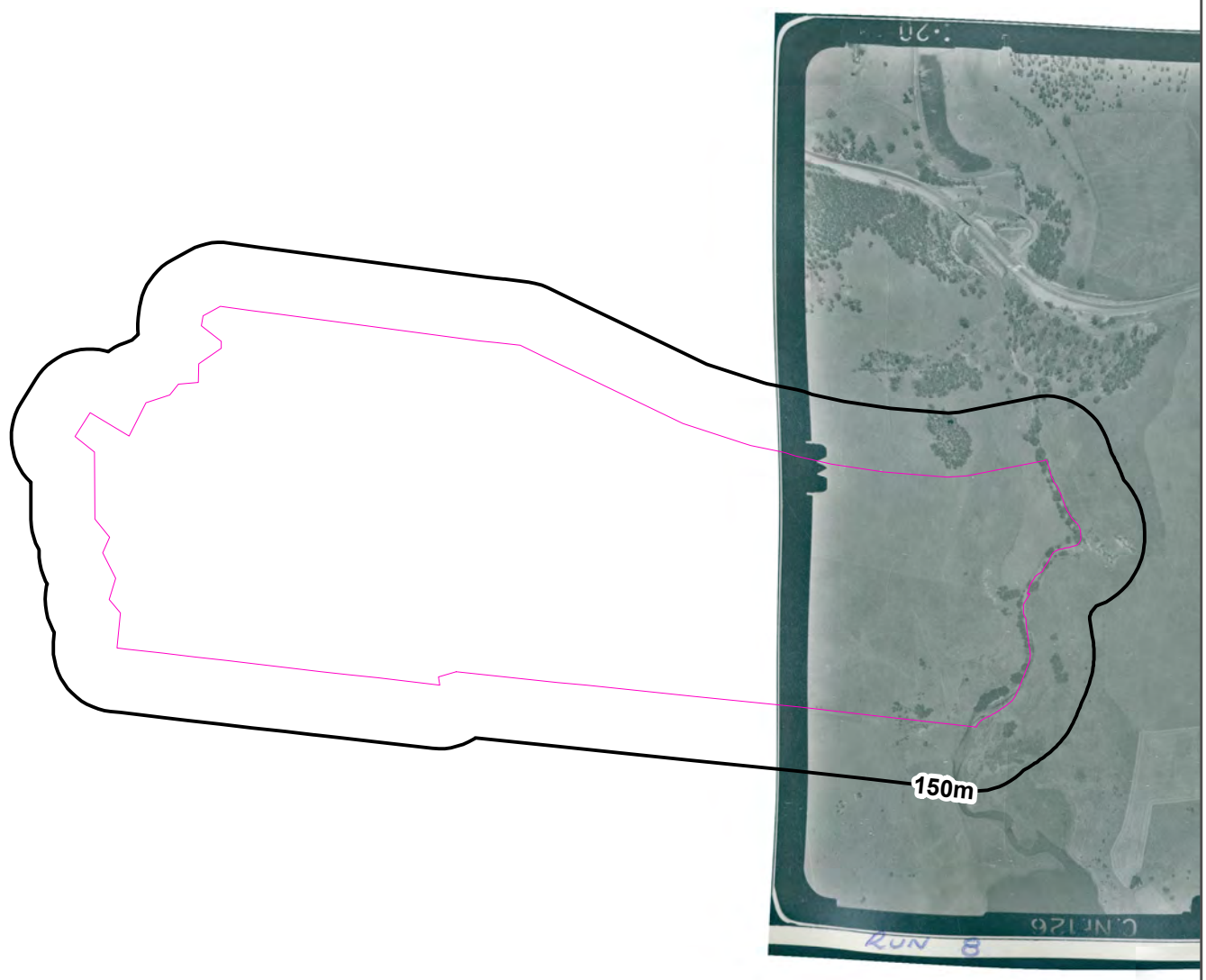
Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 27 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1961

124 Hopetoun Park, Hopetoun Park, VIC 3188



Legend

- Site Boundary
- Buffer 150m

Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 21 April 2022
0 190 380 570 760 Meters	© Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)	GDA 1994 MGA Zone 55	

Aerial Imagery 1951

124 Hopetoun Park, Hopetoun Park, VIC 3188

Data Source Aerial Imagery:
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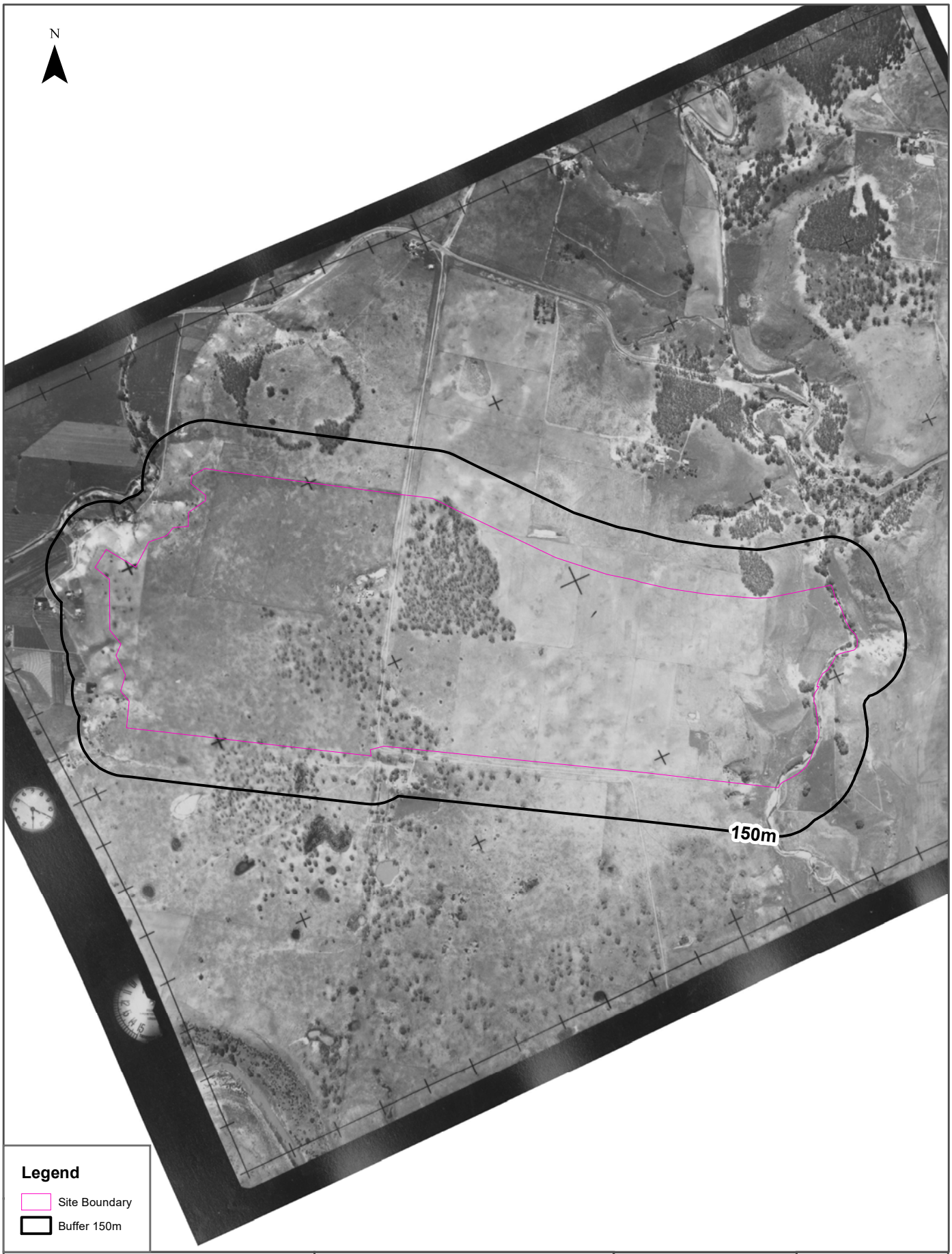
(Vicmap Topographic Mapping Program)

Coordinate System:
GDA 1994 MGA Zone 55

Date: 20 April 2022

Aerial Imagery 1946

124 Hopetoun Park, Hopetoun Park, VIC 3188



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

Coordinate System:
GDA 1994 MGA Zone 55

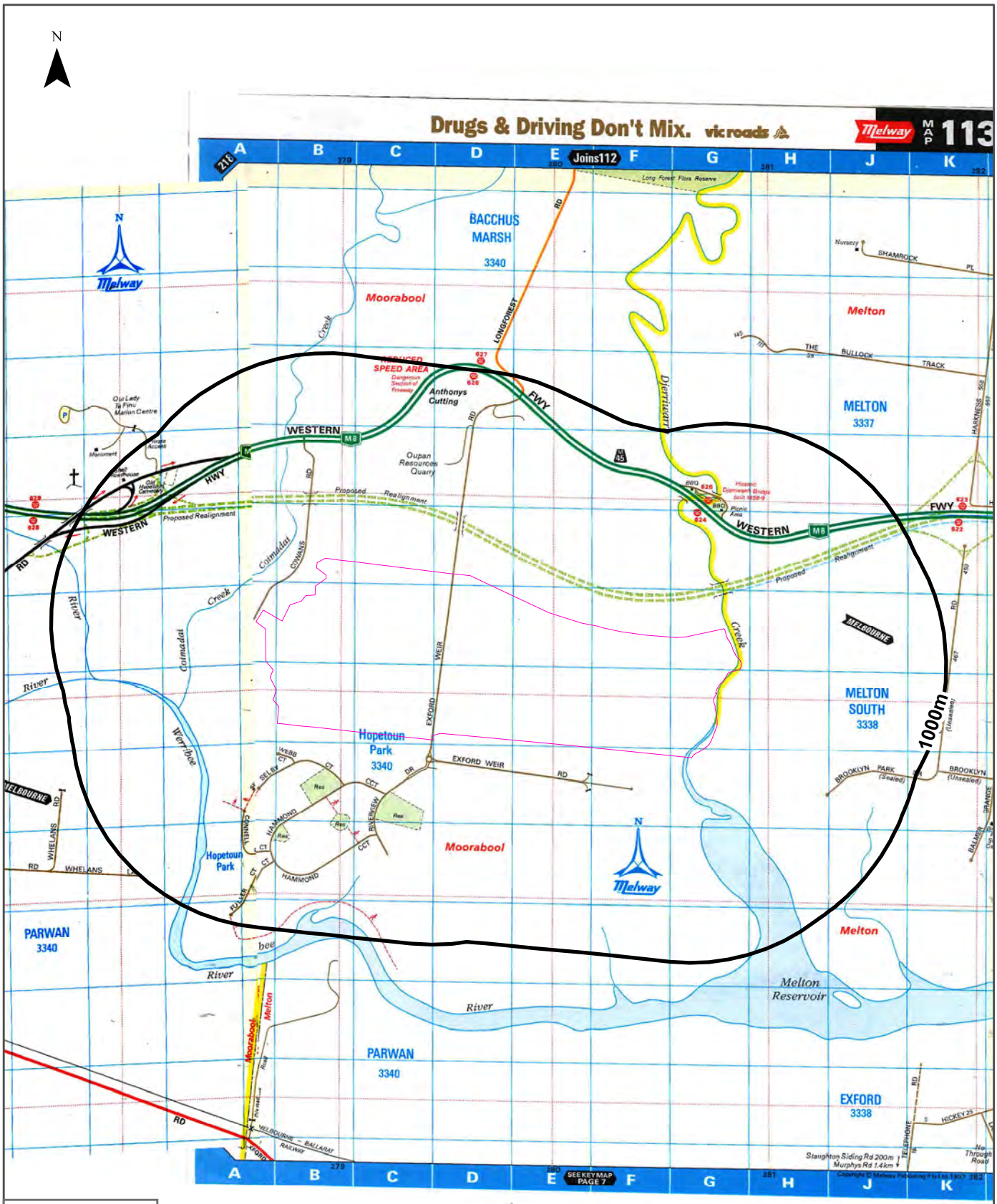
Date: 27 April 2022

Historical Map 2009

124 Hopetoun Park, Hopetoun Park, VIC 3188

Historical Map 1998

124 Hopetoun Park, Hopetoun Park, VIC 3188



Legend

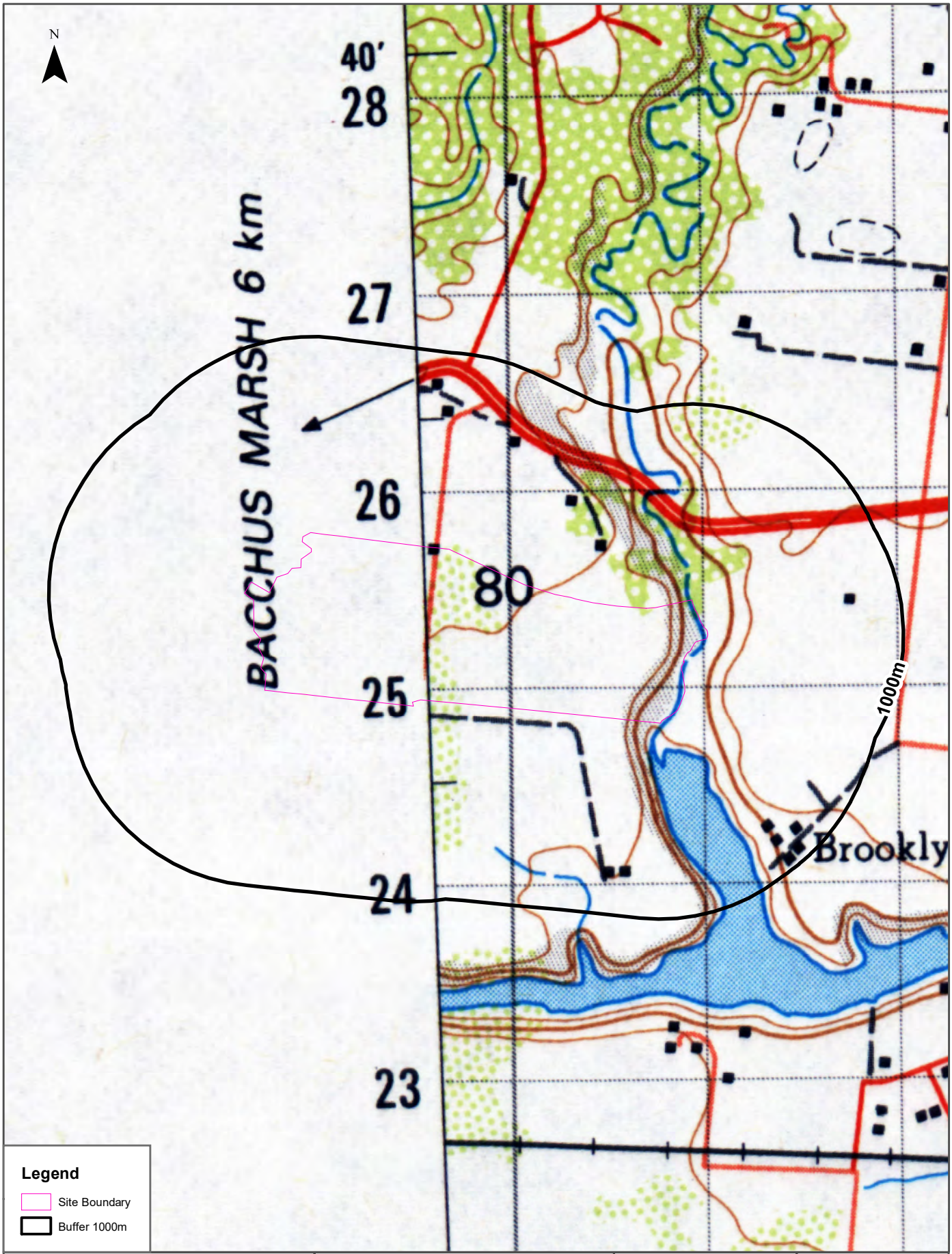
- Site Boundary
- Buffer 1000m

Scale:	Data Sources: Maps reproduced from 1998, Edition 26 of the Melway Street Directory	Coordinate System: GDA 1994 MGA Zone 55	Date: 22 April 2022

0 310 620 930 1,240 Meters

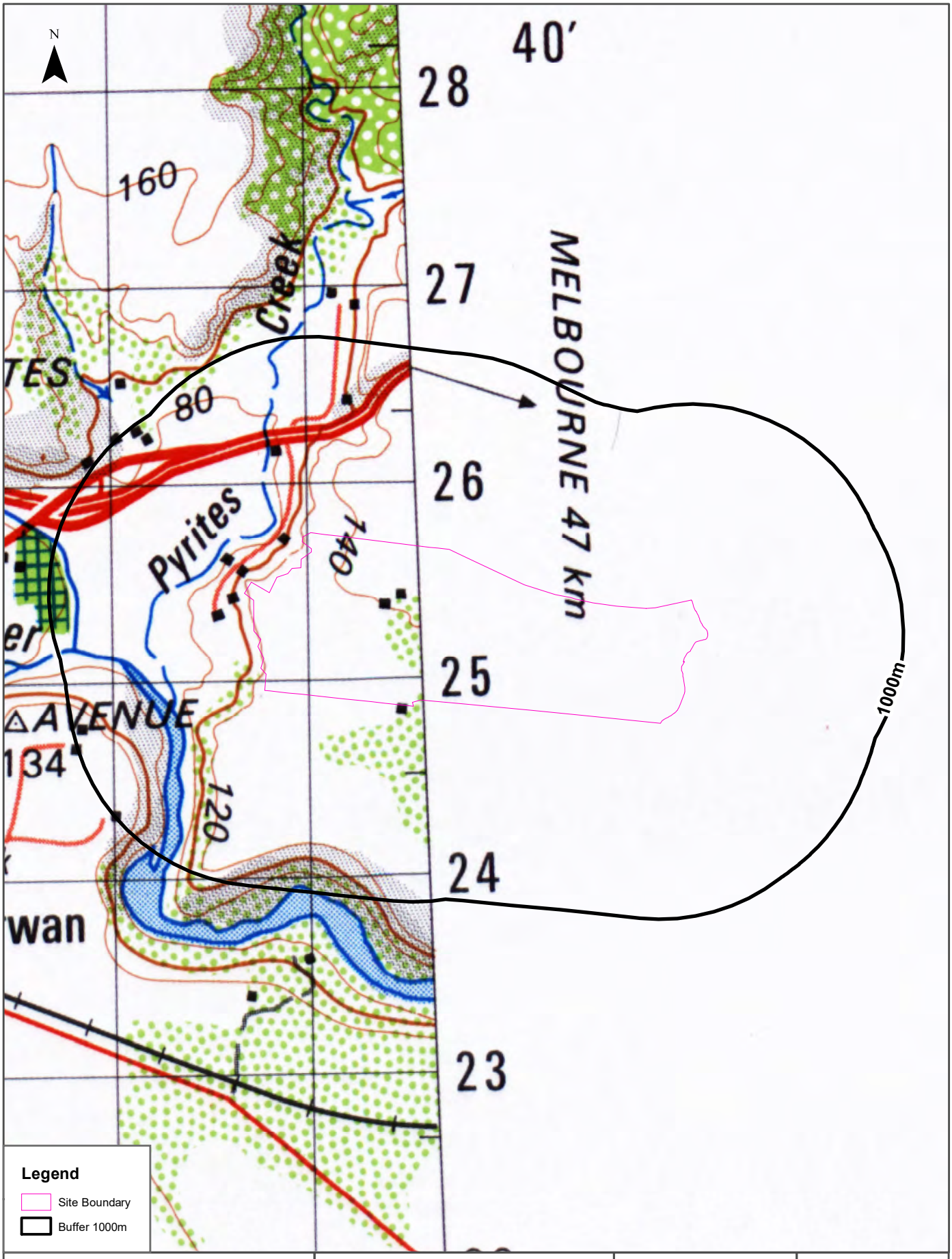
Historical Map 1982

124 Hopetoun Park, Hopetoun Park, VIC 3188



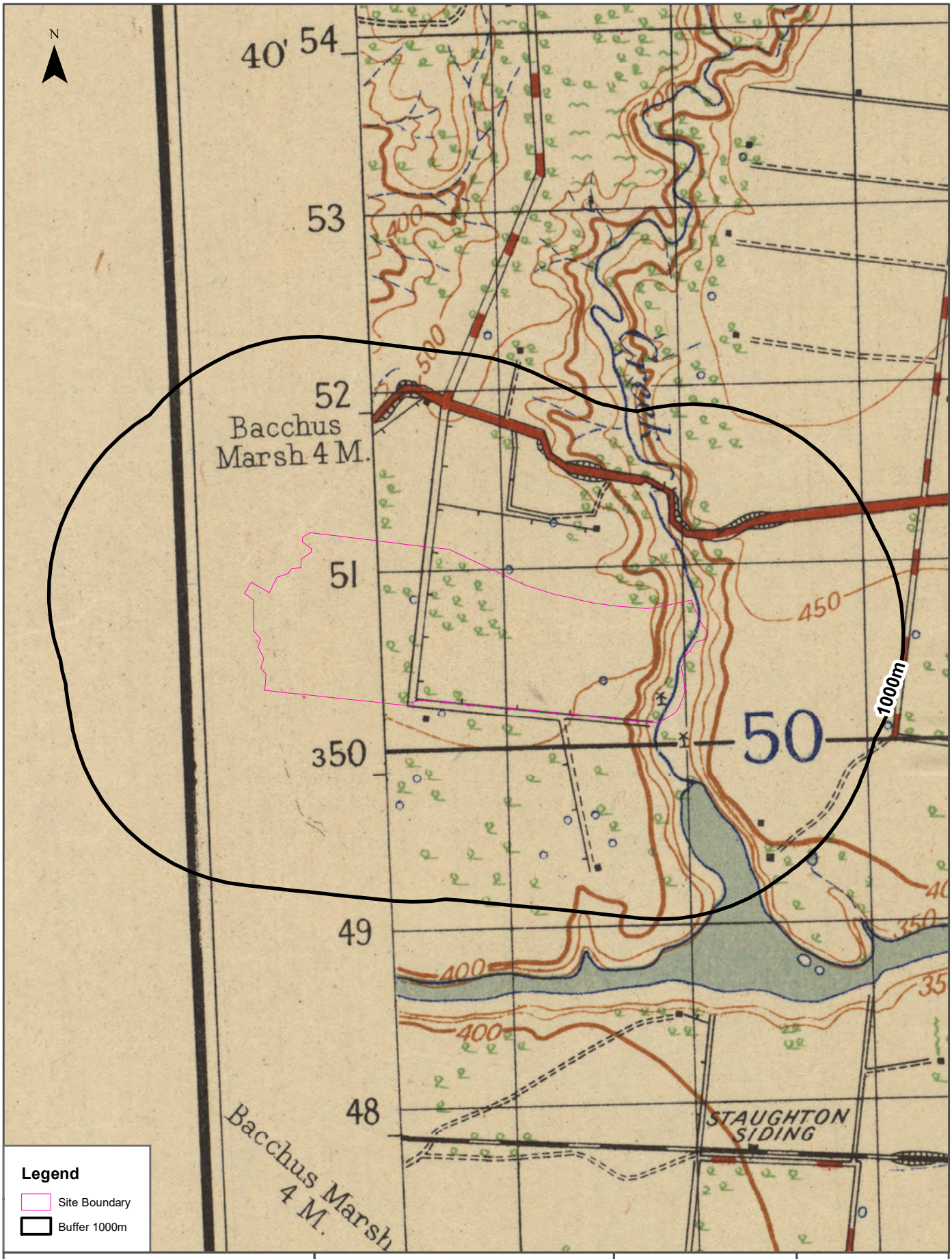
Historical Map 1981

124 Hopetoun Park, Hopetoun Park, VIC 3188



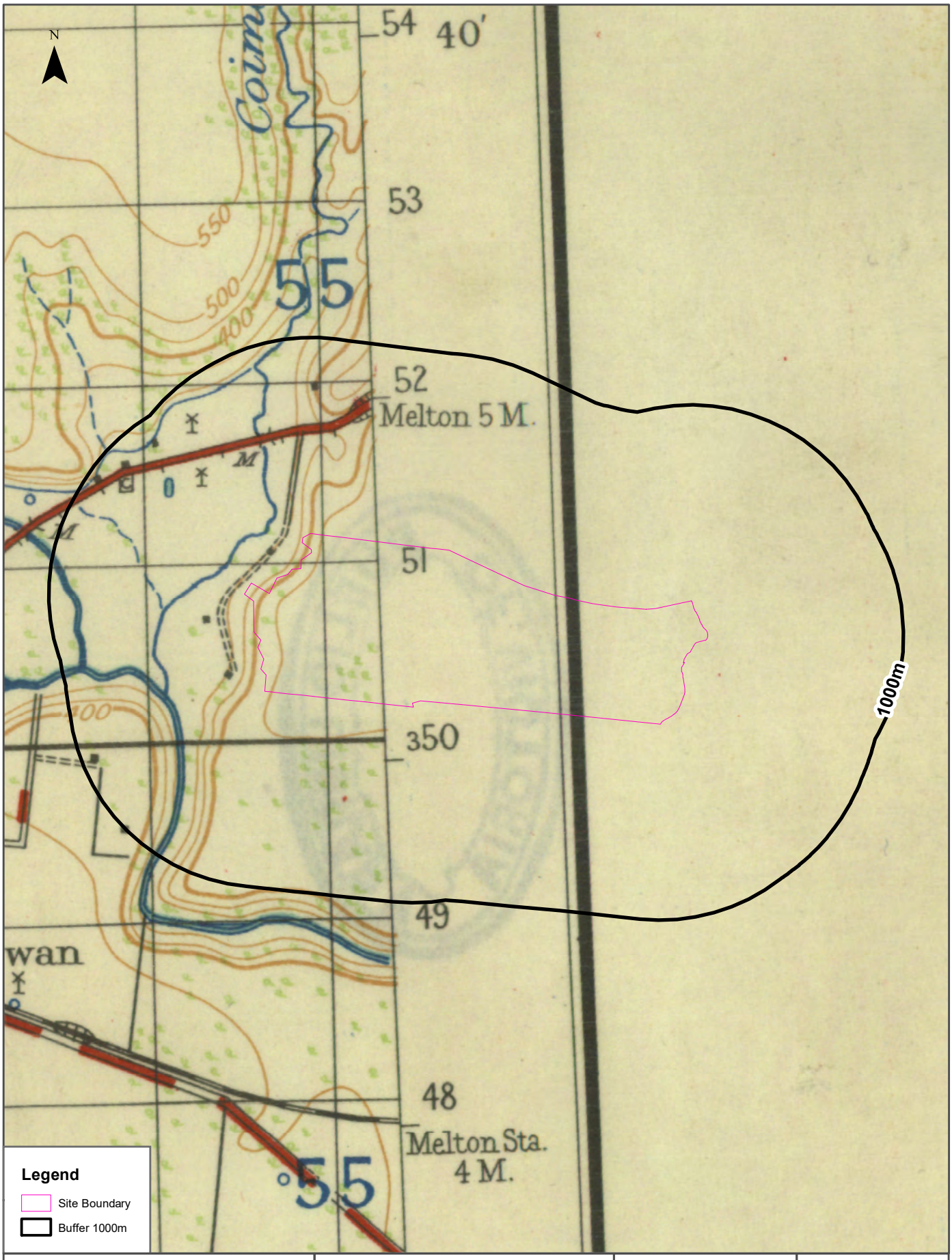
Historical Map c.1938

124 Hopetoun Park, Hopetoun Park, VIC 3188



Historical Map c.1936

124 Hopetoun Park, Hopetoun Park, VIC 3188

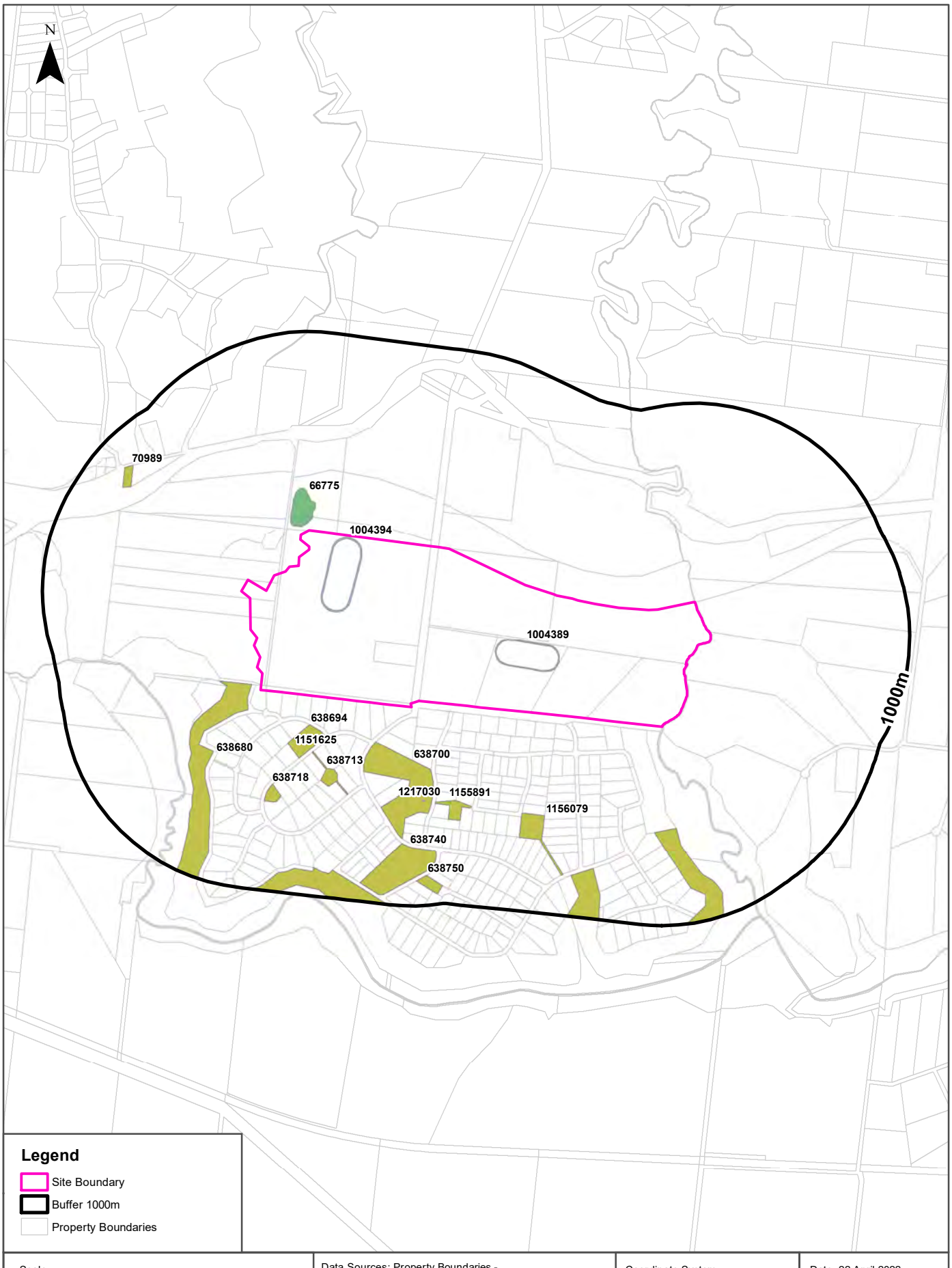


Historical Map c.1916

124 Hopetoun Park, Hopetoun Park, VIC 3188

Features of Interest

124 Hopetoun Park, Hopetoun Park, VIC 3188



Features of Interest

124 Hopetoun Park, Hopetoun Park, VIC 3188

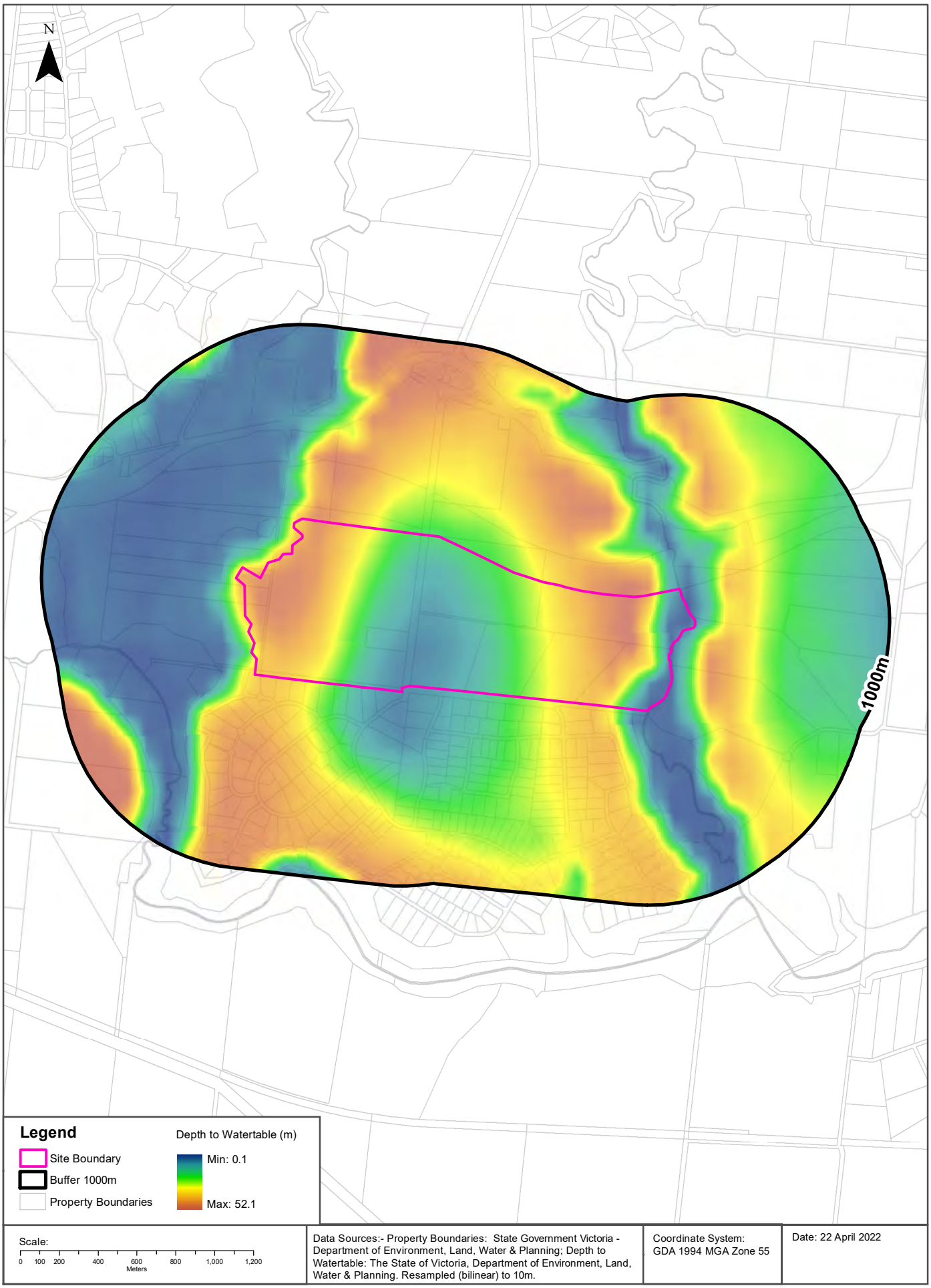
Features of Interest

Features of Interest within the dataset buffer:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
1004394	sport facility	training track		0m	On-site
1004389	sport facility	training track		0m	On-site
66775	excavation site	quarry		36m	North West
638680	reserve	park		49m	South West
638694	reserve	park		146m	South West
638700	reserve	park		195m	South West
1151625	recreational resource	playground		263m	South West
638713	reserve	park		280m	South West
638718	reserve	park		466m	South West
1217030	recreational resource	playground		469m	South
1155891	reserve	park		477m	South
1156079	reserve	park		506m	South
638740	reserve	park		688m	South
70989	reserve	cemetery	Hopetoun Cemetery	755m	North West
638750	reserve	park		850m	South

Depth to Watertable

124 Hopetoun Park, Hopetoun Park, VIC 3188



Data Sources:- Property Boundaries: State Government Victoria - Department of Environment, Land, Water & Planning; Depth to Watertable: The State of Victoria, Department of Environment, Land, Water & Planning. Resampled (bilinear) to 10m.

Coordinate System: GDA 1994 MGA Zone 55

Date: 22 April 2022

Hydrogeology & Groundwater

124 Hopetoun Park, Hopetoun Park, VIC 3188

Hydrogeology

Description of aquifers within the dataset buffer:

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

Groundwater Salinity

On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
7,000 - 13,000 mg/l	71
3,500 - 7,000 mg/l	29

Depth to Watertable

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
20 to 50 metres	56
10 to 20 metres	21
5 to 10 metres	17
Less than 5 metres	6
Greater than 50 metres	1

Surface Elevation

Approximate on-site Surface Elevation:

Surface Elevation
82 AHDm to 145 AHDm

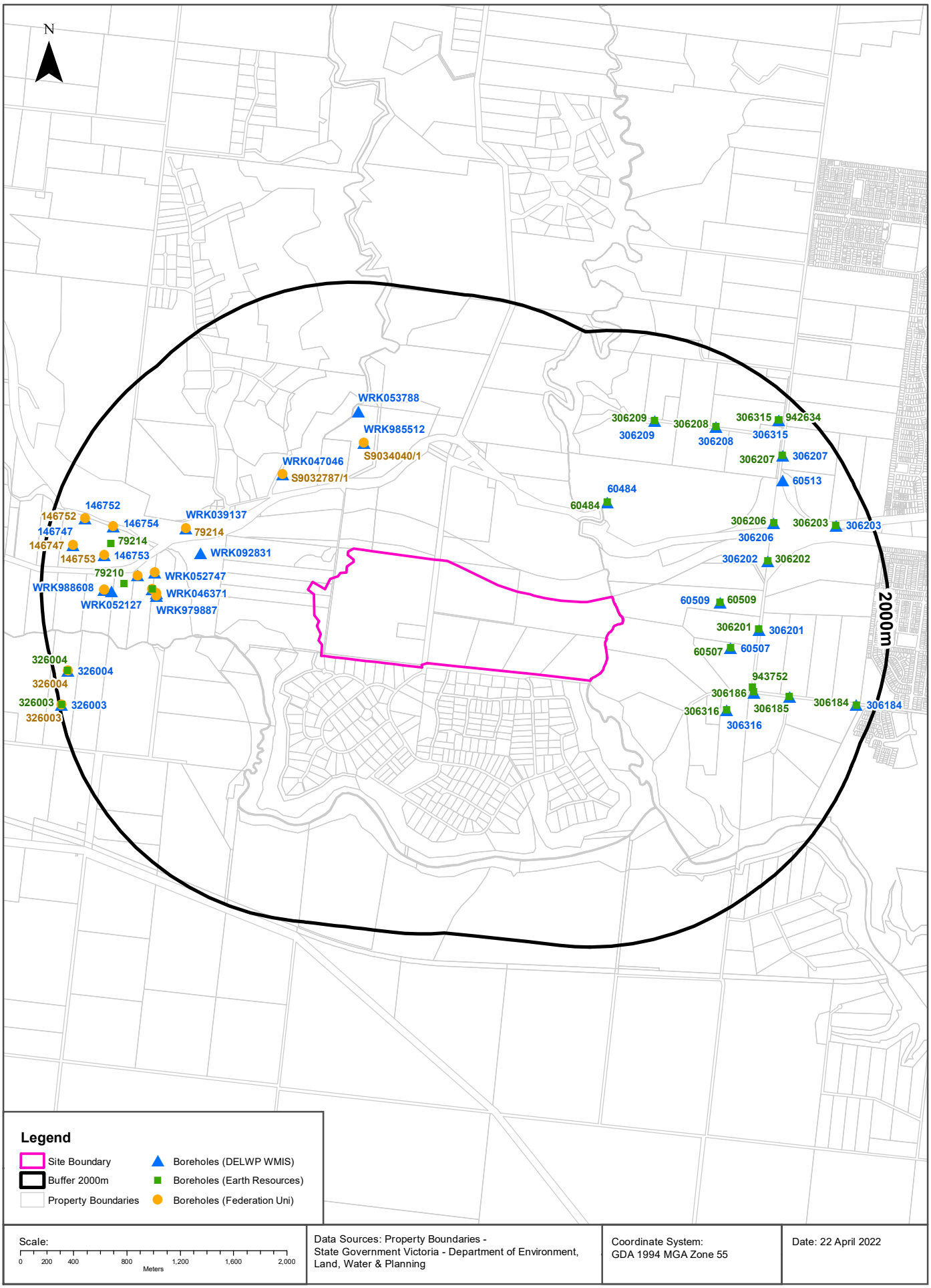
Basement Elevation

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
65 AHDm to 100 AHDm

Groundwater Boreholes

124 Hopetoun Park, Hopetoun Park, VIC 3188



Groundwater Boreholes

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
60484	Not Known					31/12/1958	711m	North East
60509	Not Known	0.00m-4.50m SOIL AND CLAY 4.50m-15.00m BASALT 15.00m-17.00m RED BASALTIC CLAY 17.00m-38.00m BASALT 38.00m-44.00m COMPACTED GRAVELLY CLAYS 44.00m-55.00m BROWN COAL				22/08/1987	739m	East
WRK047046		0.00m-1.00m SILTY TOP SOIL 1.00m-11.00m SILTY CLAY 11.00m-18.00m SAND, MEDIUM 18.00m-24.00m GRAVEL 24.00m-30.00m GREY CLAY	0.00m-12.00m INNER LINING - CASING = Pvc 12.00m-24.00m INNER LINING - SCREEN = Pvc 9.00m-10.00m OUTER LINING - GRAVEL = Bentonite 10.00m-30.00m OUTER LINING - GRAVEL = Gravel			09/02/2008	758m	North West
WRK985512	Domestic & Stock	1.00m-2.00m SANDY TOPSOIL 2.00m-5.00m SILTY CLAY 6.00m-10.00m HEAVY GRAVELS 10.00m-11.00m SILTY CLAY 11.00m-15.00m SANDS & GRAVELS	3.00m-15.00m INNER LINING - CASING = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Bentonite 1.00m-15.00m OUTER LINING - GRAVEL = Gravel			01/01/1950	798m	North West
60507	Not Known	0.00m-5.00m CLAY 5.00m-8.00m BASALT 8.00m-18.00m SCORIA 18.00m-32.00m BASALT 32.00m-50.00m YELLOW CLAY				01/07/1984	832m	East
WRK092831	Irrigation	0.00m-7.00m Top soil & gravel 7.00m-12.00m LARGE GRAVEL & CLAY 12.00m-22.00m SILTY CLAYS 22.00m-27.00m COAL& GRAVEL 27.00m-58.00m SAND& CLAY SEAMS	0.50m-49.00m INNER LINING - CASING = Pvc 49.00m-55.00m INNER LINING - SCREEN = Stainless Steel 55.00m-58.00m INNER LINING - CASING = Stainless Steel 0.00m-32.00m OUTER LINING - GRAVEL = Cement 32.00m-58.00m OUTER LINING - GRAVEL = Gravel		49.00m-55.00m Sand	06/04/2016	852m	West
306316	Non Groundwater					09/03/1984	976m	East
WRK039137	Irrigation	0.00m-4.27m LOAM 4.27m-8.53m GRAVEL (OLD BED) 8.53m-9.75m COAL 9.75m-17.06m SAND (SOUP) 17.06m-18.89m COAL 18.89m-24.38m COURSE SAND AND COAL 24.38m-36.57m MEDIUM SAND	0.00m-30.40m INNER LINING - CASING = Pvc 30.40m-36.50m INNER LINING - SCREEN = Pvc		30.40m-36.50m Sand	17/05/1984	1023 m	West
306201	Non Groundwater					25/05/1983	1024 m	East
WRK053788	Domestic & Stock, Irrigation	0.00m-1.50m top soil 1.50m-7.00m clay 7.00m-10.00m gravel 10.00m-16.00m grey clay 16.00m-19.00m sand 19.00m-30.00m grey clay	0.10m-16.00m INNER LINING - CASING = Pvc 16.00m-19.00m INNER LINING - SCREEN = Stainless Steel 19.00m-30.00m INNER LINING - CASING = Pvc 0.00m-9.00m OUTER LINING - GRAVEL = Cement 9.00m-12.00m OUTER LINING - GRAVEL = Bentonite 12.00m-30.00m OUTER LINING - GRAVEL = Gravel		0.10m-16.00m Clay 16.00m-19.00m Sand 19.00m-30.00m Clay	25/08/2010	1031 m	North West
306186	Non Groundwater					12/05/1983	1118 m	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK046371	Irrigation	0.00m-2.00m DRY LIGHT BROWN SEDS 2.00m-4.00m MOIST LIGHT BROWN CLAYS SAND SEDIMENTS 4.00m-6.00m GRE CLAYS AND SEDS (HIGH CLAY) 6.00m-8.00m GREY SEDS LOW CLAY CONTENT .23 METRES LOW/SPH ROUND AND ANG 8.00m-10.00m UP TO .05 METRE LOW/SPH ROUND AND ANG PEBBLES, SEDS AND CLAY 10.00m-14.00m COAL AND ANGULAR QUARTZ .08 METRE STONE 14.00m-16.00m COAL (DENSE) AND ANG QUARTZ 16.00m-18.00m COAL (DENSE) VERY LITTLE STONE 18.00m-20.00m COAL, PEBBLES AND SEDS 20.00m-22.00m CARB. COARSE GRAIN SEDS 22.00m-24.00m COAL AND SEDS. A FEW .08 METRE PEBBLES 24.00m-26.00m COAL AND SEDS 26.00m-28.00m COAL AND LITTLE SEDIMENTATION 28.00m-32.00m COAL AND SEDS 1 MM ANG PEBS 32.00m-38.00m CARB. SEDS EVENLY SORTED MEDIUM GRAIN 38.00m-40.00m DARK CARB SEDAMENTS MED GRAIN POOR/SORTED 40.00m-42.00m LIGHT BROWN CARB. SEDS, FINE GRAIN WELL SORTED 42.00m-56.00m QUARTZ PEBBLES RANGING FROM 2 MM TO 4 MM AND CARB SILTS	0.00m-50.00m INNER LINING - CASING = Pvc 50.00m-56.00m INNER LINING - SCREEN = Pvc 0.00m-56.00m OUTER LINING - GRAVEL = Gravel		50.00m-56.00m Chert	20/11/1982	1139 m	West
WRK979887							1139 m	West
WRK052747	Irrigation	0.00m-2.00m TOP SOIL 2.00m-7.00m GRAVEL 7.00m-25.00m GREY CLAY 25.00m-26.00m COAL 26.00m-30.00m GRAVEL	0.00m-25.00m INNER LINING - CASING = Pvc 25.00m-30.00m INNER LINING - SCREEN = Stainless Steel 9.00m-21.00m OUTER LINING - GRAVEL = Cement			29/07/2009	1156 m	West
319777	Sec Bores (Use Unidentified)					02/07/1946	1169 m	West
306202	Non Groundwater					26/05/1983	1170 m	East
WRK979212						01/07/2008	1284 m	West
306206	Non Groundwater					30/05/1983	1334 m	East
306209	Non Groundwater					01/06/1983	1360 m	North East
306185	Non Groundwater					12/05/1983	1371 m	East
WRK052127	Irrigation	0.00m-2.00m TOP SOIL 2.00m-4.00m CLAY 4.00m-8.00m COBBLES 8.00m-13.00m COAL 13.00m-17.00m SAND 17.00m-23.00m COAL 23.00m-30.00m SAND & GRAVEL	0.00m-23.00m INNER LINING - CASING = Pvc 23.00m-30.00m INNER LINING - SCREEN = Stainless Steel 8.00m-10.00m OUTER LINING - GRAVEL = Cement			16/06/2009	1473 m	West
306208	Non Groundwater					31/05/1983	1496 m	North East
WRK988608							1530 m	West
WRK989794		0.00m-2.00m TOP SOIL 2.00m-4.00m CLAY 4.00m-8.00m COBBLES 8.00m-13.00m COAL 13.00m-17.00m SAND 17.00m-23.00m COAL 23.00m-30.00m SAND & GRAVEL	0.00m-23.00m INNER LINING - CASING = Pvc 23.00m-30.00m INNER LINING - SCREEN = Stainless Steel 8.00m-10.00m OUTER LINING - GRAVEL = Cement 10.00m-30.00m OUTER LINING - GRAVEL = Gravel			16/06/2009	1530 m	West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
146754	Groundwater Investigation	0.00m-5.50m CLAY, SILT ORANGE RED BROWN 5.50m-6.50m GRAVEL AND RIVER ROCKS	-0.50m-1.50m INNER LINING - CASING = Pvc Class 18 1.50m-6.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-0.00m OUTER LINING - GRAVEL = Seal		1.50m-6.50m Gravel	26/03/2001	1536 m	West
146753	Groundwater Investigation	0.00m-5.50m CLAY, SILT ORANGE RED BROWN 5.50m-6.50m GRAVEL AND RIVER ROCKS	-0.50m-1.50m INNER LINING - CASING = Pvc Class 18 1.50m-6.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-0.00m OUTER LINING - GRAVEL = Seal		1.50m-6.50m Gravel	26/03/2001	1551 m	West
60513	Domestic, Stock	0.00m-7.60m CLAY 7.60m-20.00m MUDSTONE 20.00m-70.00m SLATE 70.00m-196.00m SLATE VERY HARD	-0.15m-70.10m INNER LINING - CASING = Not Known 70.00m-196.00m INNER LINING - SCREEN = Not Known		70.00m-196.00m	23/02/1990	1551 m	North East
306207	Non Groundwater					31/05/1983	1662 m	North East
306203	Non Groundwater					26/05/1983	1746 m	East
146752	Groundwater Investigation	0.00m-5.50m CLAY, SILT ORANGE RED BROWN 5.50m-6.50m GRAVEL AND RIVER ROCKS	-0.05m-1.50m INNER LINING - CASING = Pvc Class 18 1.50m-6.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-0.00m OUTER LINING - GRAVEL = Seal		1.50m-6.50m Gravel	26/03/2001	1756 m	West
146747	Groundwater Investigation	0.00m-5.50m C;AY, SILT ORANGE RED BROWN 5.50m-6.50m GRAVEL AND RIVER ROCKS	-0.05m-1.50m INNER LINING - CASING = Pvc Class 18 1.50m-6.50m INNER LINING - SCREEN = Pvc Class 18 0.00m-0.50m OUTER LINING - GRAVEL = Cement 0.50m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-0.00m OUTER LINING - GRAVEL = Seal		1.50m-6.50m Gravel	26/03/2001	1795 m	West
306315	Non Groundwater					28/10/1981	1823 m	North East
306184	Non Groundwater					11/05/1983	1860 m	East
326004	Non Groundwater					31/12/1944	1895 m	West
326003	Non Groundwater					31/12/1944	1983 m	West

Groundwater Boreholes

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
60484		Private Individual/Corporation				31/12/1958	3.65		300	711m	North East
60509		Private Individual/Corporation		Air Percussion/Air Rotary	Abandoned	22/08/1987	55.00		100	738m	East
60507		Private Individual/Corporation		Air Percussion/Air Rotary	Abandoned	01/07/1984	50.00		100	830m	East
306316		Private Individual/Corporation		Rotary (diamond/drag bit)		09/03/1984	97.00	135.00	300	974m	East
306201		Department of Manufacturing & Industry Development		Mechanical Auger		25/05/1983	4.20	131.40	100	1022 m	East
943752		CRA Exploration Pty Ltd		Rotary mud drilling	Completed	06/03/1984	169.43	111.86	110	1089 m	East
306186		Department of Manufacturing & Industry Development		Mechanical Auger		12/05/1983	4.00	129.30	100	1115m	East
306202		Department of Manufacturing & Industry Development		Mechanical Auger		26/05/1983	4.00	136.70	100	1169 m	East
319777		State Electricity Commission of Victoria				02/07/1946	40.80	95.00	10	1171 m	West
306206		Department of Manufacturing & Industry Development		Mechanical Auger		30/05/1983	4.25	143.00	100	1332 m	East
306209		Department of Manufacturing & Industry Development		Mechanical Auger		01/06/1983	3.80	159.00	100	1359 m	North East
306185		Department of Manufacturing & Industry Development		Mechanical Auger		12/05/1983	4.25	128.60	100	1370 m	East
79210		Private Individual/Corporation	Irrigation	Rotary (diamond/drag bit)		20/11/1982	56.00		100	1381 m	West
306208		Department of Manufacturing & Industry Development		Mechanical Auger		31/05/1983	4.25	160.00	100	1495 m	North East
79214		Private Individual/Corporation	Irrigation	Percussion (cable)		17/05/1984	36.57		100	1520 m	West
306207		Department of Manufacturing & Industry Development		Mechanical Auger		31/05/1983	4.25	147.30	100	1661 m	North East
306203		Department of Manufacturing & Industry Development		Mechanical Auger		26/05/1983	3.10	140.00	100	1745 m	East
306315		Private Individual/Corporation		Rotary (diamond/drag bit)		28/10/1981	86.00		300	1822 m	North East

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Dir
942634		CRA Exploration Pty Ltd		Rotary mud drilling	Completed	28/10/1981	86.00	148.54	25	1822 m	North East
306184		Department of Manufacturing & Industry Development		Mechanical Auger		11/05/1983	3.05	123.10	100	1858 m	East
326004		Department of Manufacturing & Industry Development				31/12/1944	14.33	86.26	10	1895 m	West
326003		Department of Manufacturing & Industry Development				31/12/1944	22.86	120.00	10	1984 m	West

Boreholes (Federation University)

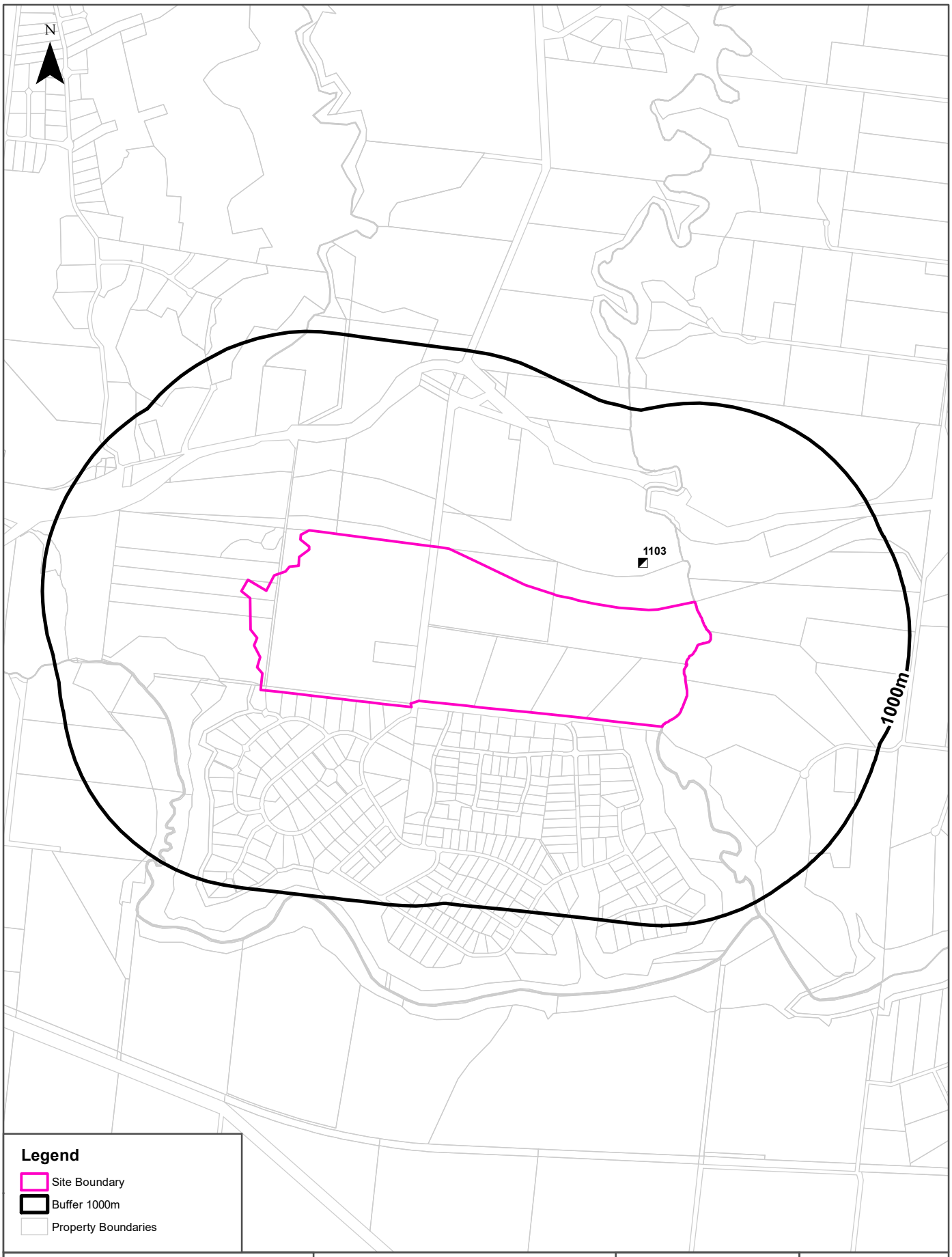
Boreholes from the Federation University Australia dataset, within the dataset buffer:

Bore Id	Authority	Type	Uses	Initial TD	Log	Dist (m)	Dir
S9032787/1		Groundwater			D: 0.000m-1.000m Silty Top Soil D: 1.000m-11.000m Silty Clay D: 11.000m-18.000m Sand D: 18.000m-24.000m Gravel D: 24.000m-30.000m Grey Clay	757m	North West
S9034040/1		Groundwater	Domestic and Stock		D: 1.000m-2.000m Sandy Topsoil D: 2.000m-5.000m Silty Clay D: 6.000m-10.000m Heavy Gravels D: 10.000m-11.000m Silty Clay D: 11.000m-15.000m Sands & Gravels	798m	North West
79214		Groundwater	Irrigation		D: 0.000m-4.300m Loam D: 4.300m-8.500m Gravel Old Bed D: 8.500m-9.800m Coal D: 9.800m-17.100m Sand Soupy D: 17.100m-17.700m Coal D: 17.700m-18.900m Coal D: 18.900m-24.400m Coarse Sand & Coal D: 24.400m-36.600m Medium Sand	1023 m	West
79210		Groundwater	Irrigation		D: 0.000m-2.000m Dry Light Brown Seds D: 2.000m-4.000m Moist Light Brown Clays Sand Sediments D: 4.000m-6.000m Gre Clays And Seds (High Clay) D: 6.000m-8.000m Grey Seds Low Clay Content .23 Metres Low/Sph Round And Ang D: 8.000m-10.000m Up To .05 Metre Low/Sph Round And Ang Pebbles D: 10.000m-14.000m Coal And Angular Quartz .08 Metre Stone D: 14.000m-16.000m Coal (Dense) And Ang Quartz D: 16.000m-18.000m Coal (Dense) Very Little Stone D: 18.000m-20.000m Coal D: 20.000m-22.000m Carb. Coarse Grain Seds D: 22.000m-24.000m Coal And Seds. A Few .08 Metre Pebbles D: 24.000m-26.000m Coal And Seds D: 26.000m-28.000m Coal And Little Sedimentation D: 28.000m-32.000m Coal And Seds 1 Mm Ang Pebs D: 32.000m-38.000m Carb. Seds Evenly Sorted Medium Grain D: 38.000m-40.000m Dark Carb Sedaments Med Grain Poor/Sorted D: 40.000m-42.000m Light Brown Carb. Seds D: 42.000m-56.000m Quartz Pebbles Ranging From 2 Mm To 4 Mm And Carb Silts	1139m	West
S9030095/1		Groundwater				1139m	West
WRK052747		Groundwater	Irrigation		D: 0.000m-2.000m Top Soil D: 2.000m-7.000m Gravel D: 7.000m-25.000m Grey Clay D: 25.000m-26.000m Coal D: 26.000m-30.000m Gravel	1156m	West

Bore Id	Authority	Type	Uses	Initial TD	Log	Dist (m)	Dir
319777	State Electricity Commission (1919 - 1993)		SEC Bores (Use unidentified)		G: 0.000m-6.400m Silt G: 6.400m-7.900m Gravel G: 7.900m-9.100m C = , Gdse = , H = , N = , Volatiles = 47.3 G: 7.900m-10.700m Inferior Coal G: 9.100m-10.700m C = , Gdse = , H = , N = , Volatiles = 45.5 G: 10.700m-12.200m Coal Brown G: 10.700m-12.200m C = , Gdse = , H = , N = , Volatiles = 45.9 G: 12.200m-16.500m Inferior Coal G: 12.200m-13.700m C = , Gdse = , H = , N = , Volatiles = 44.8 G: 16.500m-18.000m Coarse Sand G: 18.000m-21.900m Inferior Coal G: 18.000m-21.900m C = , Gdse = , H = , N = , Volatiles = 43.9 G: 21.900m-25.000m Brown Clay G: 25.000m-40.800m Sand & Gravel	1169m	West
S9029439/1		Groundwater				1284 m	West
S9036227/1		Groundwater				1530 m	West
S9037104/1		Groundwater			D: 0.000m-2.000m Top Soil D: 2.000m-4.000m Clay D: 4.000m-8.000m Cobbles D: 8.000m-13.000m Coal D: 13.000m-17.000m Sand D: 17.000m-23.000m Coal D: 23.000m-30.000m Sand & Gravel	1530 m	West
146754		Groundwater	Groundwater Investigation		D: 0.000m-5.500m Clay D: 5.500m-6.500m Gravel And River Rocks	1536 m	West
146753		Groundwater	Groundwater Investigation		D: 0.000m-5.500m Clay D: 5.500m-6.500m Gravel And River Rocks	1551 m	West
146752		Groundwater	Groundwater Investigation		D: 0.000m-5.500m Clay D: 5.500m-6.500m Gravel And River Rocks	1756 m	West
146747		Groundwater	Groundwater Investigation		D: 0.000m-5.500m C;Ay D: 5.500m-6.500m Gravel And River Rocks	1795 m	West
326004	Victorian Mines Department (1909 - 1977)		Non Groundwater		D: 0.000m-0.300m Loam D: 0.300m-1.800m Grey Clay D: 1.800m-4.900m Grey And Yellow Clay D: 4.900m-5.200m Sand And Gravel D: 5.200m-7.900m Drift Sand And Gravel D: 7.900m-12.800m Brown Coal D: 12.800m-13.100m Ligneous Clay D: 13.100m-14.300m Yellow Clay	1895 m	West
326003	Victorian Mines Department (1909 - 1977)		Non Groundwater		D: 0.000m-0.300m Loam D: 0.300m-0.600m Red Clay D: 0.600m-1.500m Basalt D: 1.500m-6.400m Clay, Gravel, And Basalt D: 6.400m-11.900m Yellow Clay D: 11.900m-12.200m Ligneous Clay D: 12.200m-21.300m Brown Coal D: 21.300m-21.900m Ligneous Clay D: 21.900m-22.900m Sandy Clay	1983 m	West

Historical Mining Activity - Shafts

124 Hopetoun Park, Hopetoun Park, VIC 3188



Historical Mining Activity - Shafts

124 Hopetoun Park, Hopetoun Park, VIC 3188

Historical Mining Activity - Shafts

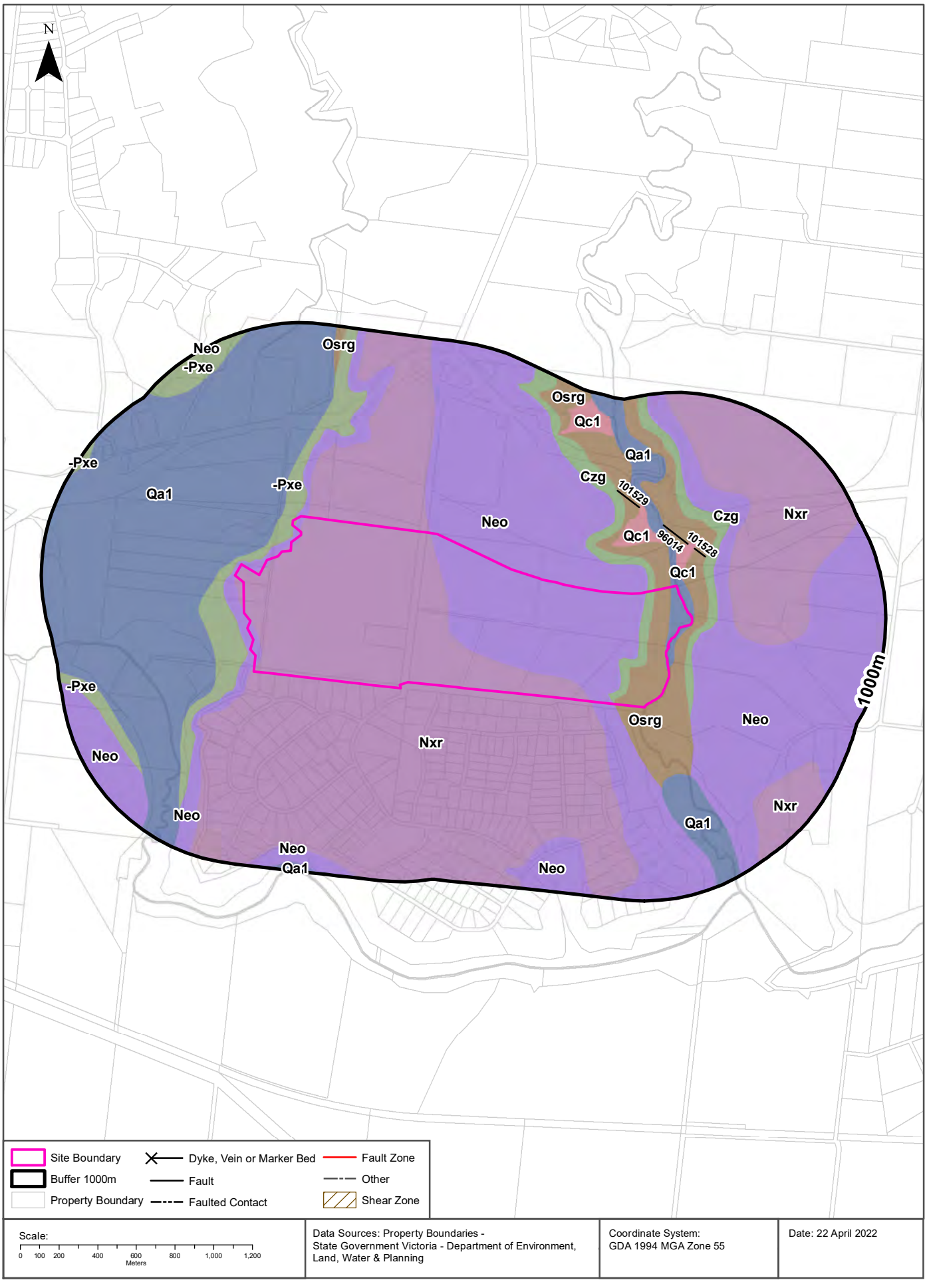
Mine Shaft Locations were collected by a variety of methods from 1869 in some areas of the state, mainly concentrating in Ballarat and Bendigo. In places a shaft may be recorded multiple times with a different source. In cases where several shaft locations are shown close together (generally with separations 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
1103	Sandstone Quarry	Heritage Inventory					10	235m	East

Geology

124 Hopetoun Park, Hopetoun Park, VIC 3188



Geology

124 Hopetoun Park, Hopetoun Park, VIC 3188

Geological Units 1:50,000

What are the Geological Units within the dataset buffer?

Symbol	Name	Description	Geological Age	Lithology	Distance	Direction
Nxr	Darley Gravel (Nxr): generic	Gravel, sand, silt: gravel red to pale colours; rounding and sorting moderate to good; moderately consolidated; massive to trough cross-bedded; gravel clasts of vein quartz, sandstone, basalt, ironstone in proportions that reflect the local source	Neogene to Pleistocene	gravel material (significant); sand (significant); silt material (significant)	0m	On-site
Neo	Newer Volcanic Group - basalt flows (Neo): generic	Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocene to Holocene	alkali basalt (major proportion); tholeiitic basalt (major proportion); alluvium (minor proportion); tuff (minor proportion)	0m	On-site
Osrg	Riddell Sandstone Gisbornian(Osrg): generic	Sandstone, black shale, black and grey siltstone: sandstone thin to thick-bedded; turbiditic (Tae, Tabc, Tbc, Tc); shale commonly graptolitic; minor pebbel conglomerate with well-rounded pebbles; Gisbornian age.	Gisbornian to Gisbornian	shale (significant); siltstone (significant); conglomerate (minor proportion); sandstone (minor proportion)	0m	On-site
Czg	conglomerate and sandstone (Czg): generic	Conglomerate, quartz sandstone and siltstone: consolidated to commonly ferruginised; variably sorted; cross-bedding common	Paleocene to Pliocene	conglomerate (major proportion); siltstone (trace proportion); quartz arenite (significant)	0m	On-site
Qa1	alluvium(Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	Pleistocene to Holocene	gravel material (significant); sand (significant); silt material (significant)	0m	On-site
-Pxe	Werribee Formation (-Pxe): generic	Sand, silt, clay, gravel in variable proportions: generally white to pale grey; in part carbonaceous, pyritic; ferruginous bands common; contains Cinnamomum flora	Eocene to Miocene	sand (significant); silt material (significant); clay lithology (significant); gravel material (significant)	0m	On-site
Qc1	colluvium(Qc1): generic	Diamictite, gravel, sand, silt, clay, rubble: sorting variable, usually poor; generally poorly rounded; clasts locally sourced; includes channel deposits with better rounding and sorting	Pliocene to Holocene	diamictite (dominant); gravel material (significant); sand (significant); silt material (significant)	42m	East

Geology

124 Hopetoun Park, Hopetoun Park, VIC 3188

Geological Structures 1:50,000

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

Map Id	Type	Name	Contact	Positional Accuracy	Distance	Direction
101528	fault	Greendale fault		indefinite	210m	East
96014	fault	Greendale fault		indefinite	226m	East
101529	fault	Greendale fault		indefinite	437m	North East

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

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

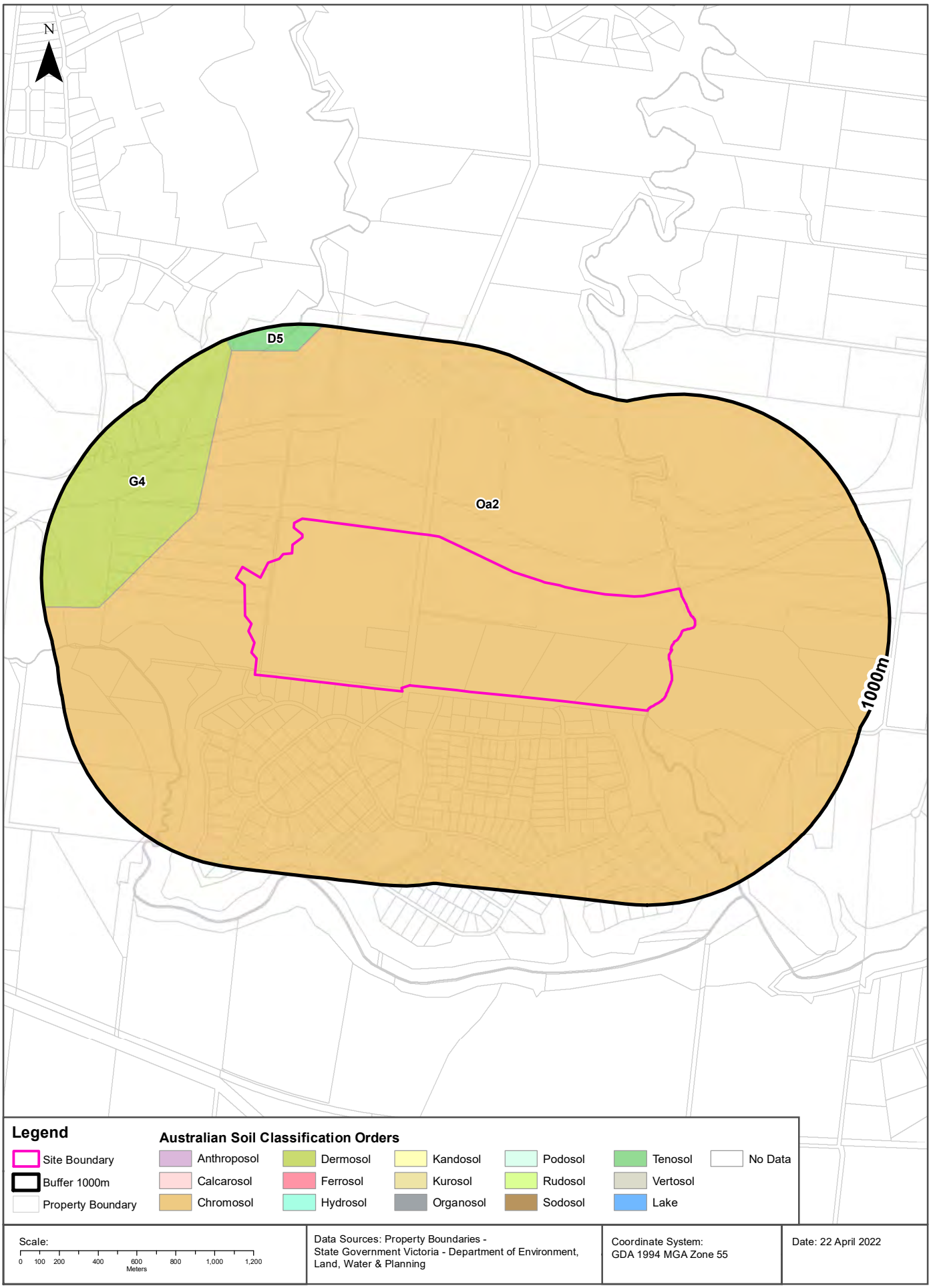
Geological Structures 1:250,000

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

124 Hopetoun Park, Hopetoun Park, VIC 3188



Soils

124 Hopetoun Park, Hopetoun Park, VIC 3188

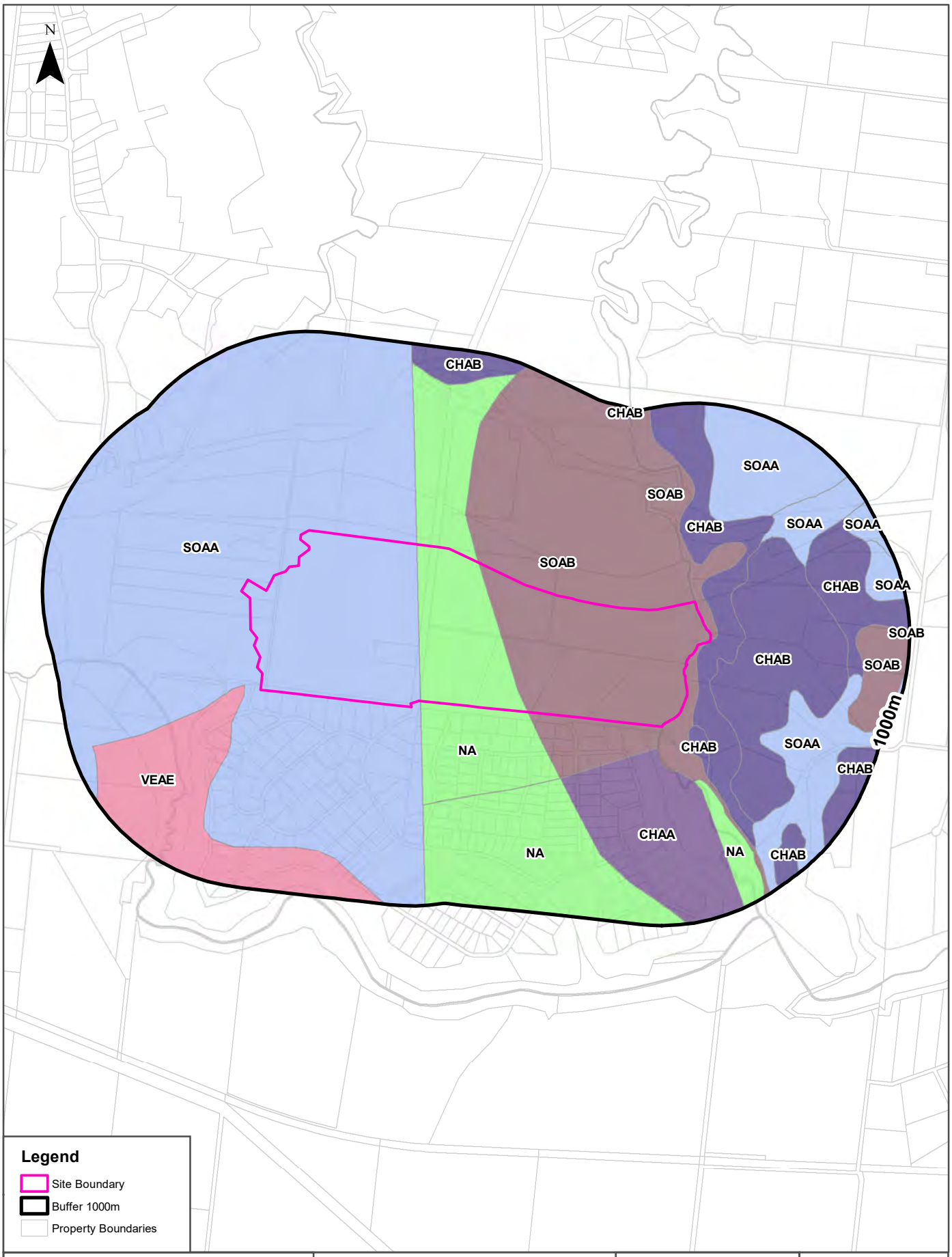
Atlas of Australian Soils

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

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Oa2	Chromosol	Dissected plateaux at low elevation: plains of hard alkaline red soils (Dr2.13) often in gilgai micro- association with dark cracking clays (Ug5.1), and grey and brown cracking clays (Ug5.2 and Ug5.3), small areas of other soils such as (Dr2.33), (Dy3.43), and (Dd1.l); also with (1) low, broad, sprawling stony rises of (Dr2.13), (2) low rounded hills of various (D) soils such as (Db1.23) with boulder strewn slopes, and (3) incised, often gorge-like, stream valleys of undescribed soils.	0m	On-site
G4	Dermosol	Plains: floodplains and low terraces of various friable loamy soils (Um6), friable earths (Gn4), and other soils including (Dd) and (Dy); area has a relatively high water-table. Remnants of higher terraces of hard alkaline red soils (Dr2.23) occur also.	369m	North West
D5	Tenosol	Rugged hills at low elevation: rugged steep hilly areas of shallow grey-brown sandy soils (Uc6. 11) with many rock outcrops, in association with shallow forms of hard red soils (Dr2.2) and shallow forms of hard yellow mottled soils (Dy3.2); dissected by deeply incised stream valleys of un-described soils.	860m	North West

Victorian Soil Type Mapping

124 Hopetoun Park, Hopetoun Park, VIC 3188



Soils

124 Hopetoun Park, Hopetoun Park, VIC 3188

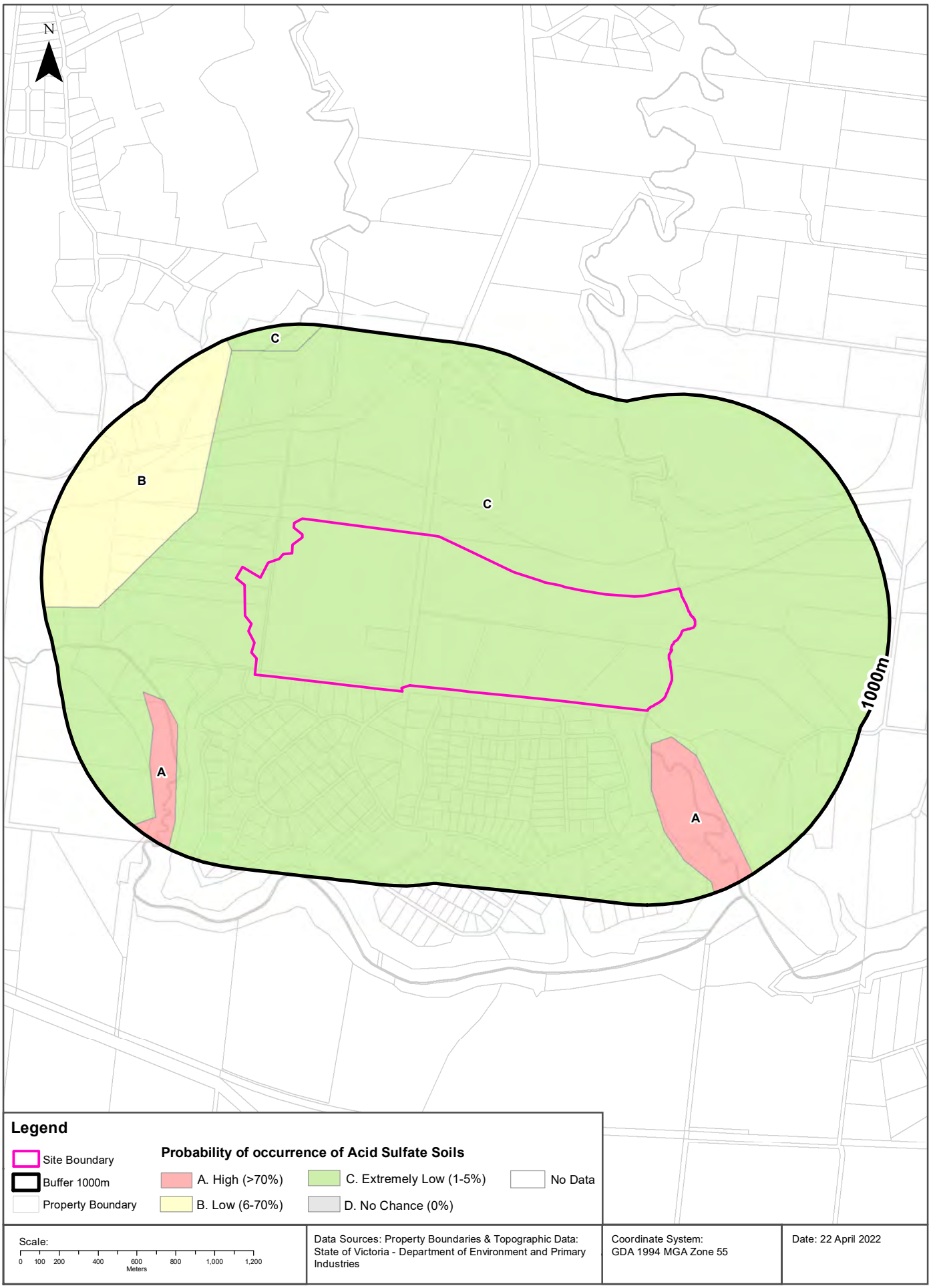
Victorian Soil Type Mapping

Victorian Soil Types within the dataset buffer:

Symbol	Description	Distance	Direction
SOAA	Red Sodosols	0m	On-site
NA	Unassigned	0m	On-site
SOAB	Brown Sodosols	0m	On-site
CHAB	Brown Chromosols	0m	East
VEAE	Black Vertosols	83m	South West
CHAA	Red Chromosols	111m	South East

Atlas of Australian Acid Sulfate Soils

124 Hopetoun Park, Hopetoun Park, VIC 3188



Acid Sulfate Soils

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
A	High Probability of occurrence. >70% chance of occurrence.	168m	South East
B	Low Probability of occurrence. 6-70% chance of occurrence.	370m	North West

Acid Sulfate Soils

124 Hopetoun Park, Hopetoun Park, VIC 3188

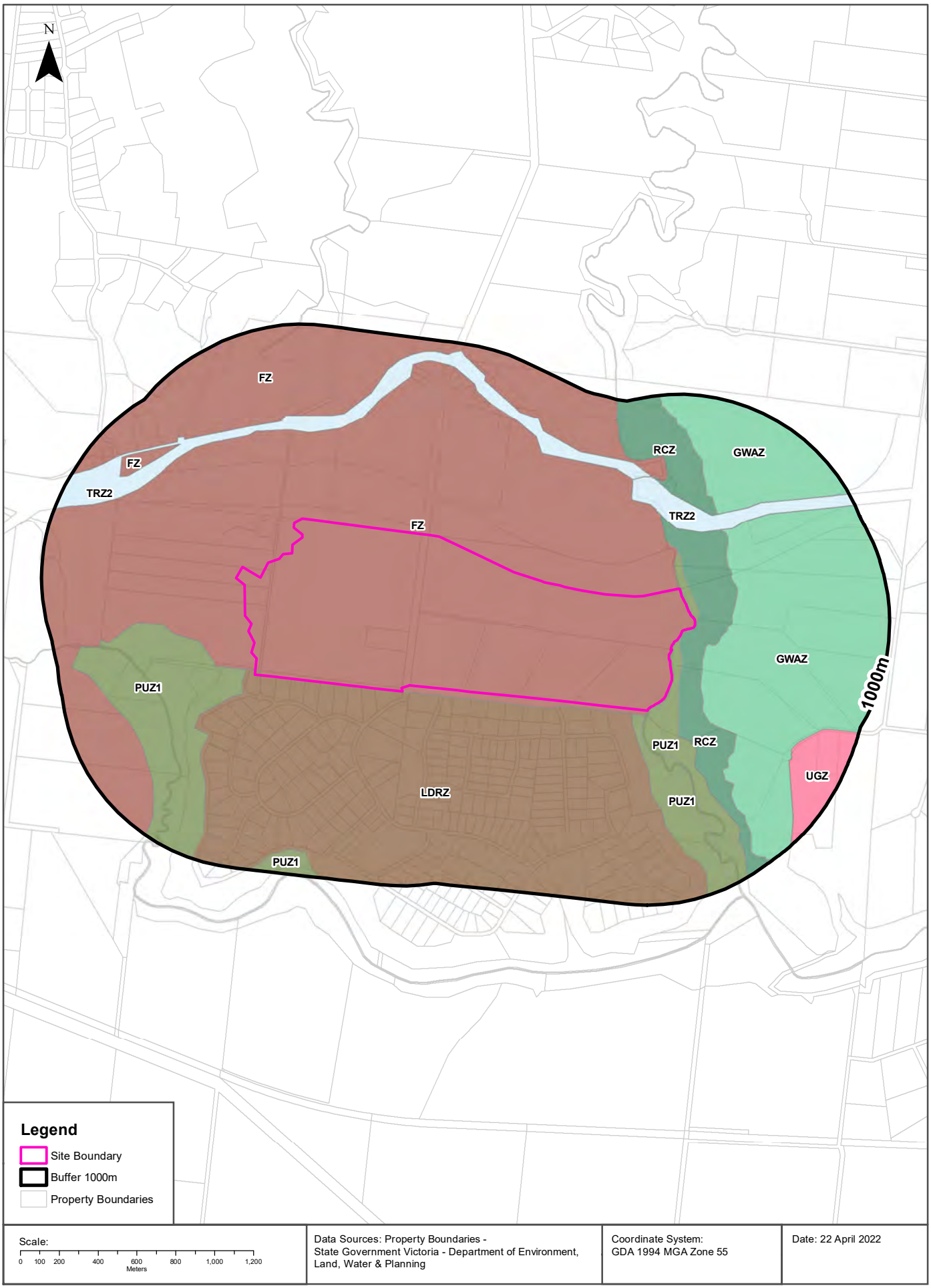
Coastal Acid Sulfate Soils

Coastal Acid Sulfate Soil types within the dataset buffer:

Coastal Acid Sulfate Soil Types	Distance	Direction
No records in buffer		

Planning Zones

124 Hopetoun Park, Hopetoun Park, VIC 3188



Planning

124 Hopetoun Park, Hopetoun Park, VIC 3188

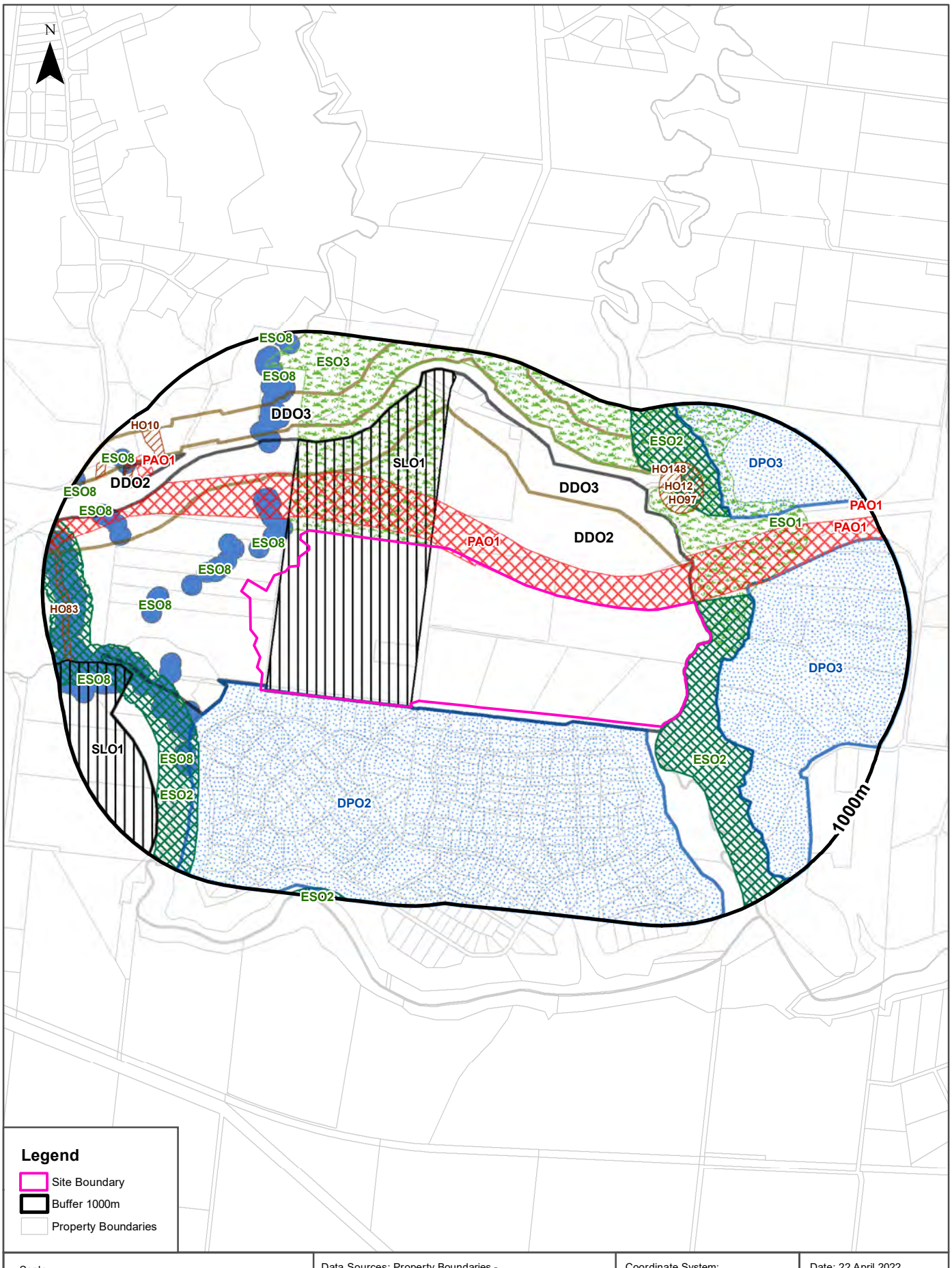
Planning Zones

Planning zones within the dataset buffer:

Zone Code	Description	Distance	Direction
FZ	FARMING ZONE	0m	On-site
LDRZ	LOW DENSITY RESIDENTIAL ZONE	0m	South
PUZ1	PUBLIC USE ZONE - SERVICE AND UTILITY	0m	South East
RCZ	RURAL CONSERVATION ZONE	1m	East
PUZ1	PUBLIC USE ZONE - SERVICE AND UTILITY	25m	West
GWAZ	GREEN WEDGE A ZONE	113m	East
TRZ2	TRANSPORT ZONE 2 - PRINCIPAL ROAD NETWORK	303m	East
RCZ	RURAL CONSERVATION ZONE	412m	North East
GWAZ	GREEN WEDGE A ZONE	430m	North East
TRZ2	TRANSPORT ZONE 2 - PRINCIPAL ROAD NETWORK	444m	North West
FZ	FARMING ZONE	514m	North West
UGZ	URBAN GROWTH ZONE	701m	South East
FZ	FARMING ZONE	706m	North West

Planning Overlays

124 Hopetoun Park, Hopetoun Park, VIC 3188



Planning

124 Hopetoun Park, Hopetoun Park, VIC 3188

Planning Overlays

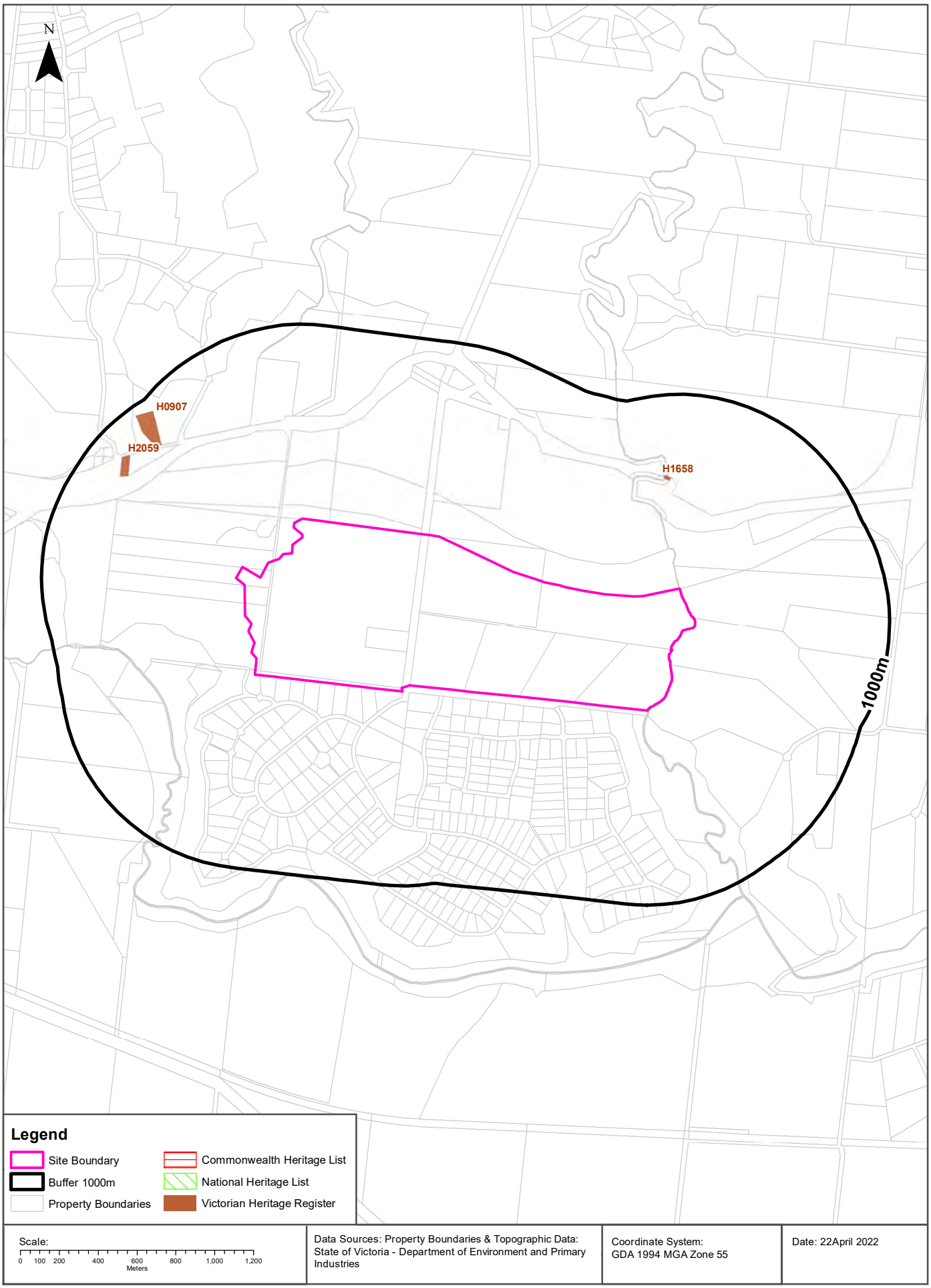
Planning overlays within the dataset buffer:

Zone Code	Description	Distance	Direction
DDO2	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2	0m	On-site
SLO1	SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 1	0m	On-site
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	On-site
DPO2	DEVELOPMENT PLAN OVERLAY - SCHEDULE 2	0m	South
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	0m	South East
ESO3	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 3	0m	North
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	East
ESO1	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 1	2m	North East
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	48m	North West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	95m	West
DPO3	DEVELOPMENT PLAN OVERLAY - SCHEDULE 3	113m	East
DDO3	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 3	184m	North West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	323m	West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	365m	West
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	380m	West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	432m	North West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	439m	South West
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	444m	North East
HO97	HERITAGE OVERLAY (HO97)	452m	North East
DPO3	DEVELOPMENT PLAN OVERLAY - SCHEDULE 3	465m	North East
DDO3	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 3	514m	North West
HO9	HERITAGE OVERLAY (HO9)	559m	North East
HO148	HERITAGE OVERLAY (HO148)	565m	North East
HO12	HERITAGE OVERLAY (HO12)	572m	North East
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	617m	West
SLO1	SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 1	630m	West
DDO2	DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2	706m	North West
PAO1	PUBLIC ACQUISITION OVERLAY 1	718m	North West
HO10	HERITAGE OVERLAY (HO10)	753m	North West
HO16	HERITAGE OVERLAY (HO16)	755m	North West
PAO1	PUBLIC ACQUISITION OVERLAY 1	771m	North West

Zone Code	Description	Distance	Direction
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	797m	North West
HO83	HERITAGE OVERLAY (HO83)	861m	West
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	891m	North West
HO147	HERITAGE OVERLAY (HO147)	896m	North West
PAO1	PUBLIC ACQUISITION OVERLAY 1	915m	East
ESO8	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8	949m	West

Heritage

124 Hopetoun Park, Hopetoun Park, VIC 3188



Heritage

124 Hopetoun Park, Hopetoun Park, VIC 3188

Commonwealth Heritage List

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

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

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

National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

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

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

Victorian Heritage Register

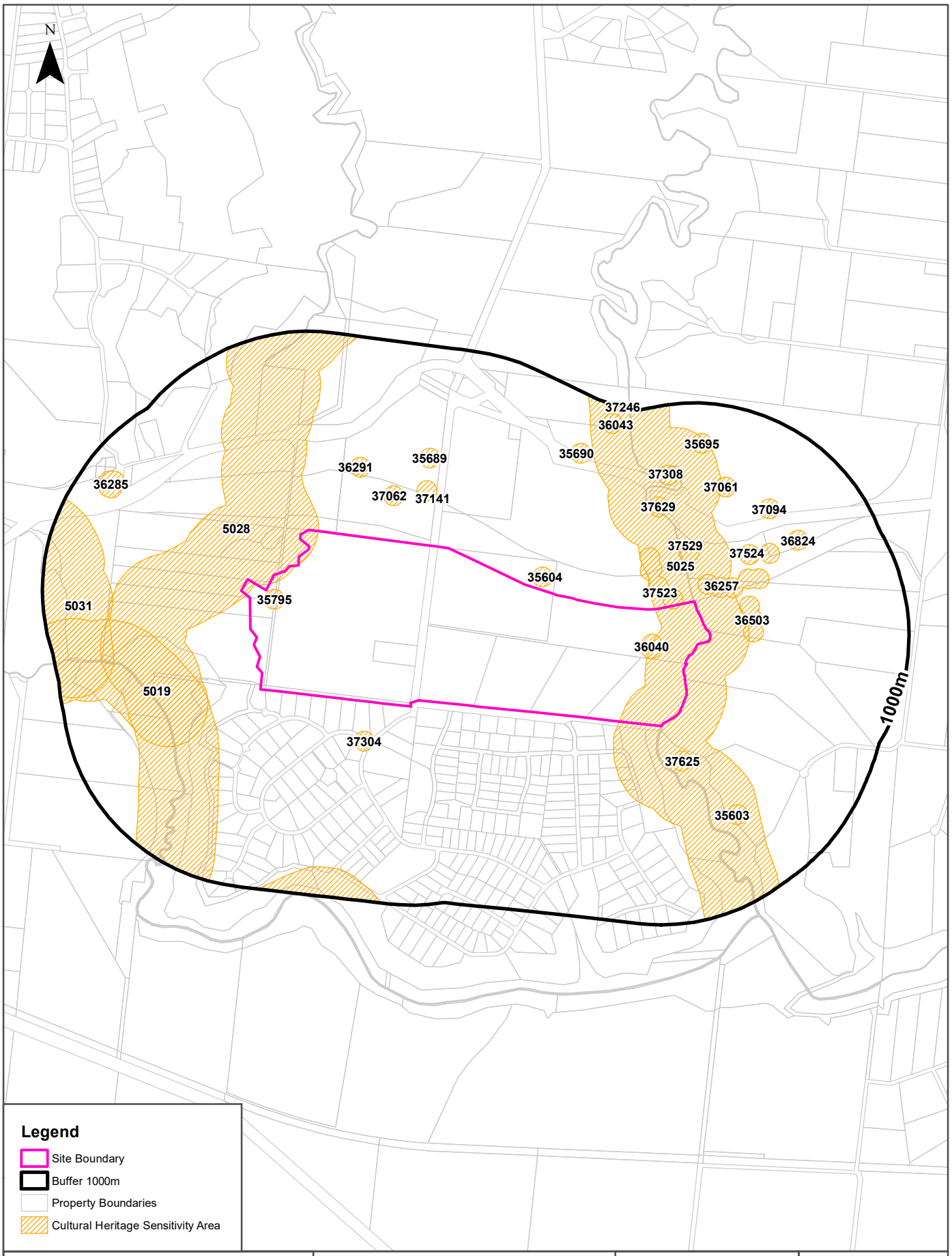
What are the Victorian Heritage Register items located within the dataset buffer?:

VHR Number	Description	Distance	Direction
H1658	BRIDGE OVER DJERRIWARRH CREEK	559m	North East
H1658	BRIDGE OVER DJERRIWARRH CREEK	570m	North East
H0907	FORMER LEAHYS RESIDENCE	753m	North West
H2059	HOPETOUN CATHOLIC CEMETERY	755m	North West

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

Cultural Heritage Sensitivity

124 Hopetoun Park, Hopetoun Park, VIC 3188



Heritage

124 Hopetoun Park, Hopetoun Park, VIC 3188

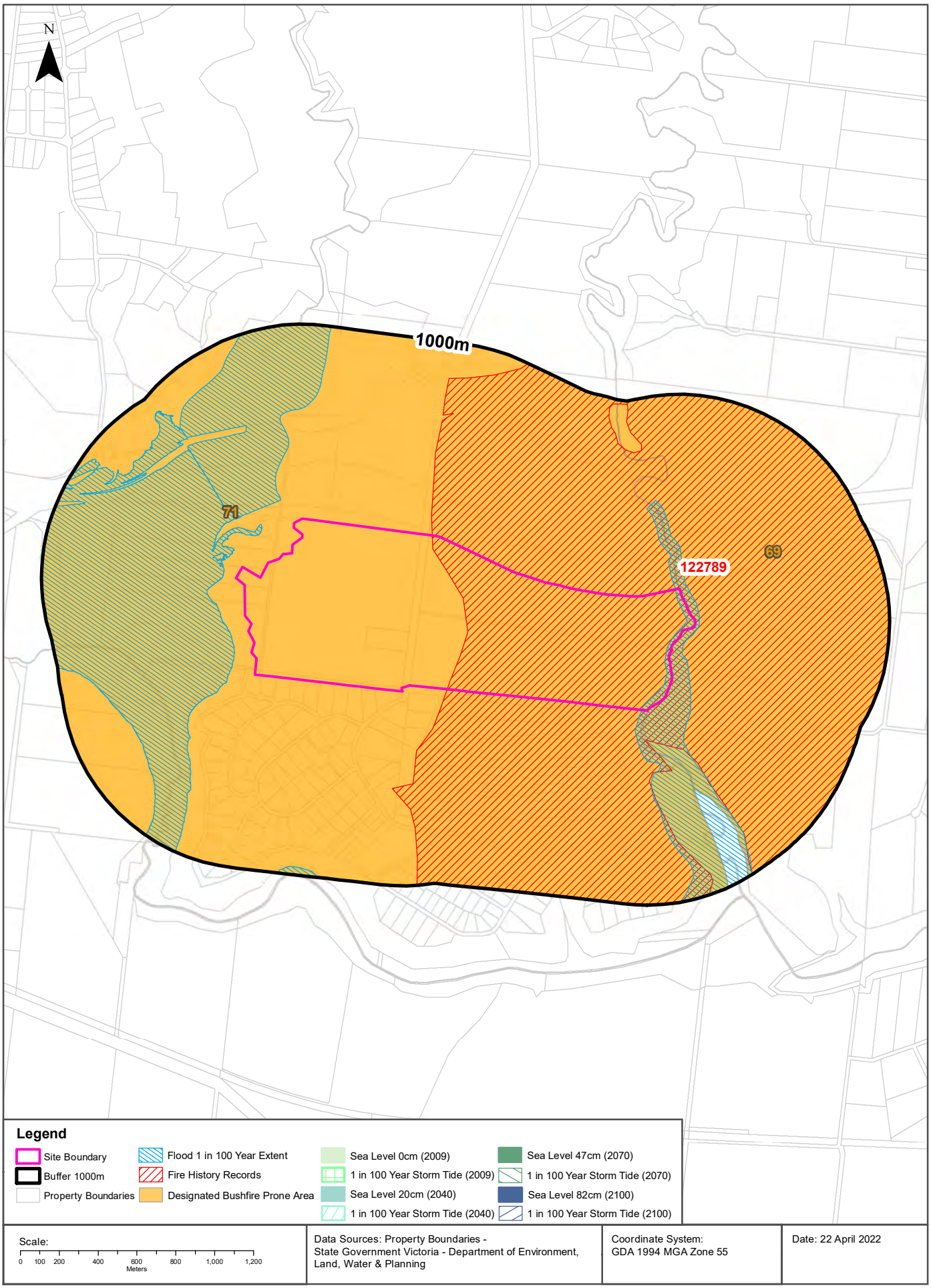
Cultural Heritage Sensitivity

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
5025	0m	On-site
5028	0m	On-site
36040	0m	On-site
35795	0m	On-site
37523	0m	On-site
35604	14m	North East
36257	61m	East
37304	150m	South West
37625	153m	South East
36503	168m	East
37062	177m	North West
37529	197m	East
37141	224m	North
5019	268m	West
36291	297m	North West
37524	316m	East
35689	389m	North
37526	401m	East
37629	453m	North East
35603	536m	South East
37061	548m	North East
37094	551m	North East
36824	557m	East
37308	600m	North East
5031	647m	West
35690	666m	North East
35695	748m	North East
36285	777m	North West
36043	852m	North East
37246	986m	North East

Natural Hazards

124 Hopetoun Park, Hopetoun Park, VIC 3188



Natural Hazards

124 Hopetoun Park, Hopetoun Park, VIC 3188

Bushfire Prone Areas

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

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
71	Designated Bushfire Prone Area	LEGL./20-485	MOORABOOL	25/01/2021	0m	On-site
69	Designated Bushfire Prone Area	LEGL./21-585	MELTON	06/07/2021	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
122789	BUSHFIRE	W198599999	1985	999	Melton	FIRE			0m	On-site

Flood - 1 in 100 year modelled flood extent

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

Feature	Source	Method	Scale	Modified Date	Distance	Direction
100 Year Flood Outline	Unknown	No contours & some flood info		01/01/2000	0m	On-site
100 Year Flood Outline	Melbourne Water	Modelled		03/10/2013	66m	West

Natural Hazards

124 Hopetoun Park, Hopetoun Park, VIC 3188

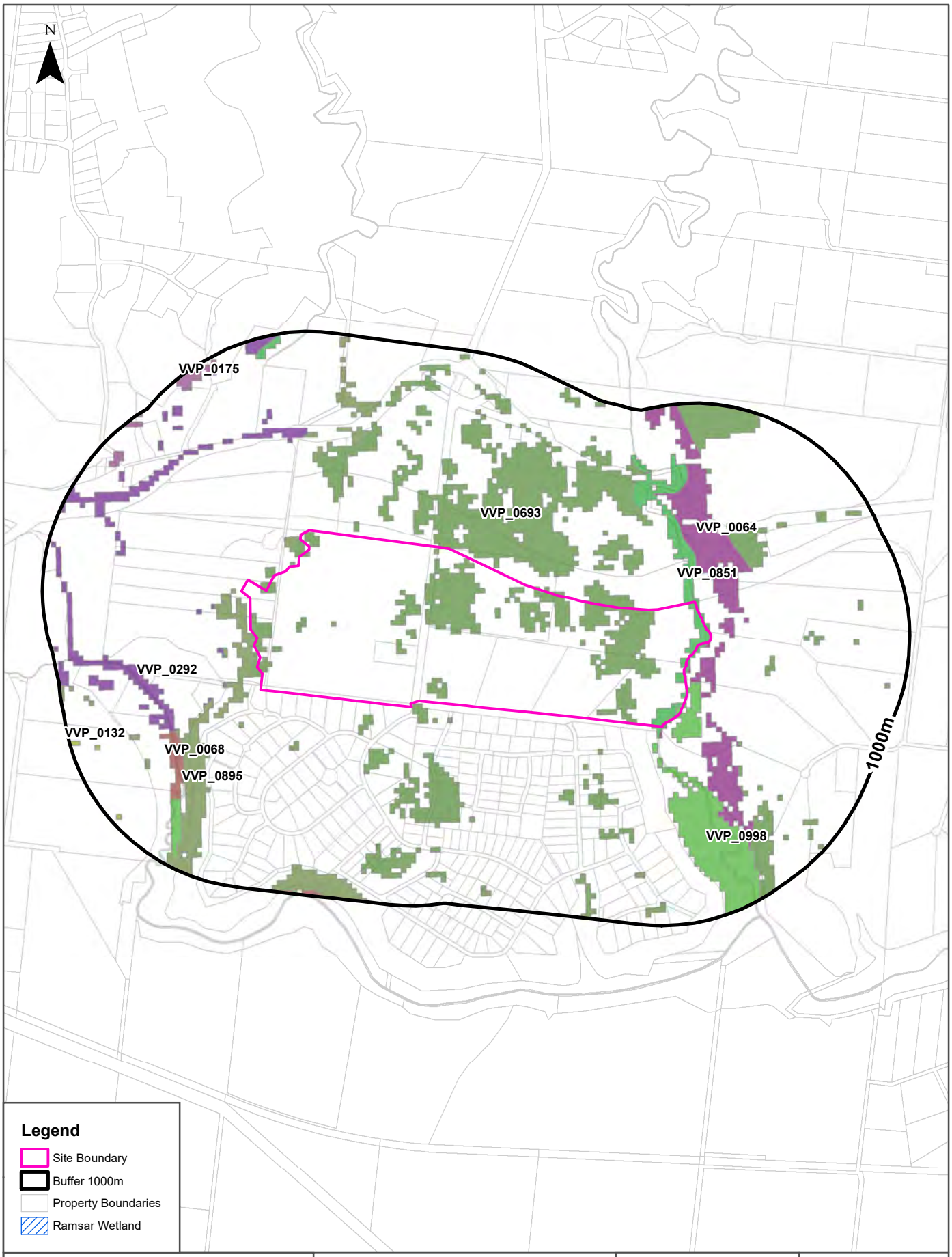
Victorian Coastal Inundation Sea Level Rise

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

124 Hopetoun Park, Hopetoun Park, VIC 3188



Ecological Constraints

124 Hopetoun Park, Hopetoun Park, VIC 3188

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
VVP_0851	Stream Bank Shrubland	0851	Riparian Scrubs or Swampy Scrubs and Woodlands		Victorian Volcanic Plain	Endangered	Naturally Restricted	0m	On-site
VVP_0998	Water Body - man-made	0998	No native vegetation recorded		Victorian Volcanic Plain	Not Applicable	not applicable	0m	On-site
VVP_0693	Plains Woodland/Plains Grassland Mosaic	0693	Plains Woodlands or Forests	Poorly-draining	Victorian Volcanic Plain	Endangered	not applicable	0m	On-site
VVP_0064	Rocky Chenopod Woodland	0064	Box Ironbark Forests or dry/lower fertility Woodlands		Victorian Volcanic Plain	Vulnerable	Minor	0m	On-site
VVP_0895	Escarpment Shrubland	0895	Plains Woodlands or Forests	Freely-draining	Victorian Volcanic Plain	Endangered	Naturally Restricted	6m	West
VVP_0292	Red Gum Swamp	0292	Wetlands	Freshwater	Victorian Volcanic Plain	Endangered	Naturally Restricted	149m	West
VVP_0068	Creekline Grassy Woodland	0068	Riverine Grassy Woodlands or Forests	Creekline and/or swampy	Victorian Volcanic Plain	Endangered	Common	478m	South West
VVP_0132	Plains Grassland	0132	Plains Grasslands and Chenopod Shrublands	Clay soils	Victorian Volcanic Plain	Endangered	Common	856m	West
VVP_0175	Grassy Woodland	0175	Lower Slopes or Hills Woodlands	Grassy	Victorian Volcanic Plain	Endangered	Common	865m	North West

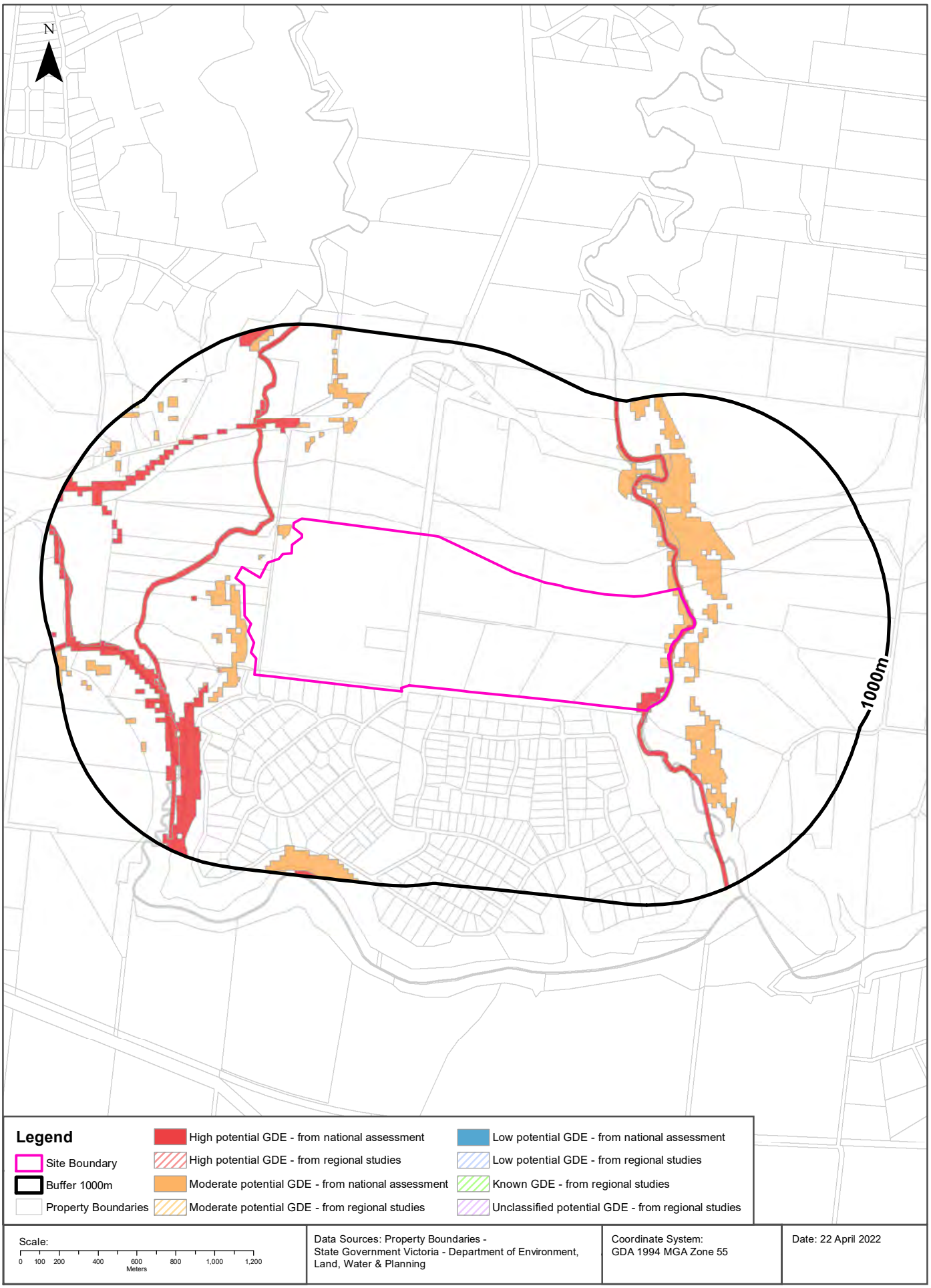
Ramsar Wetlands

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

124 Hopetoun Park, Hopetoun Park, VIC 3188



Ecological Constraints

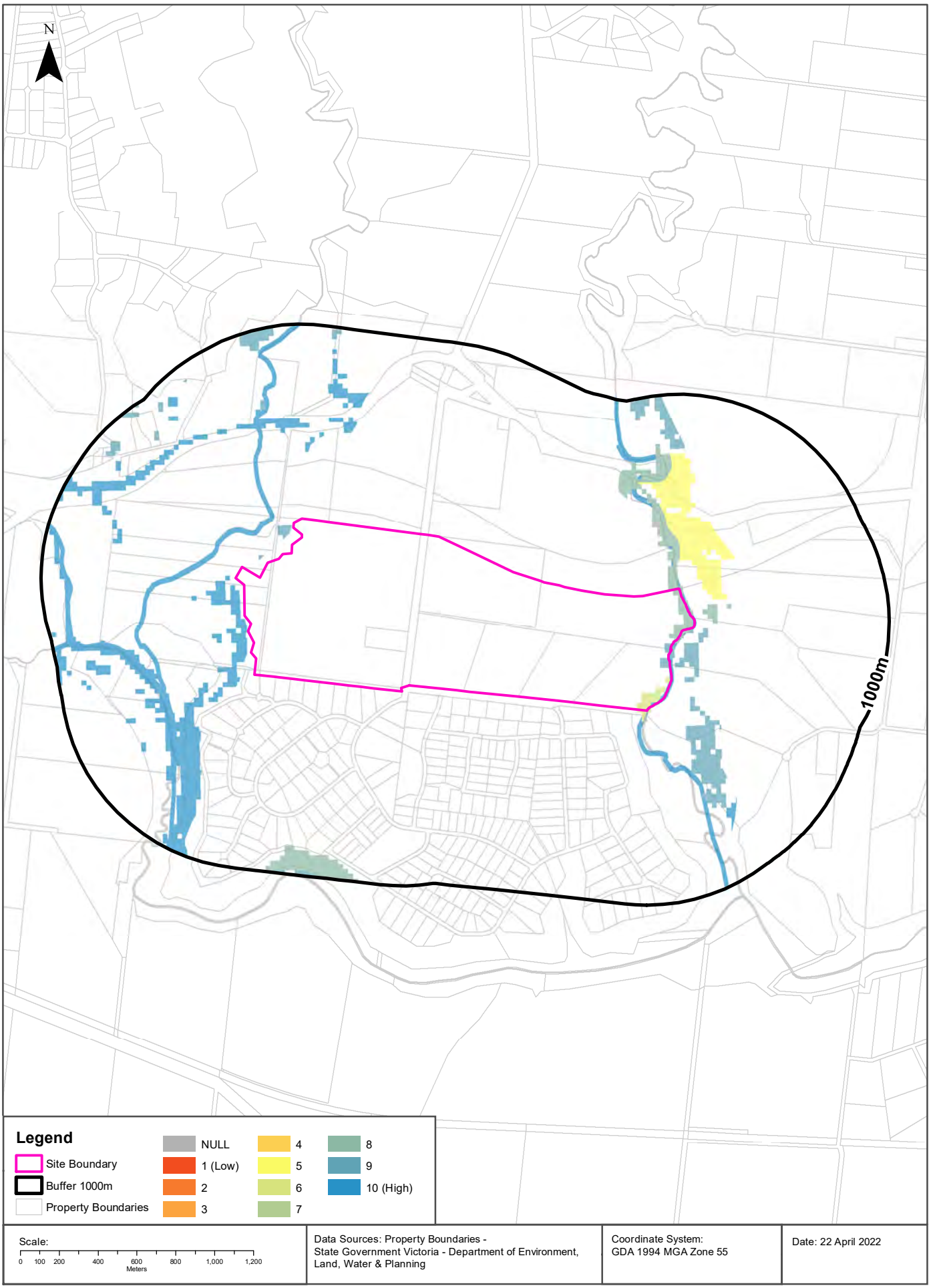
124 Hopetoun Park, Hopetoun Park, VIC 3188

Groundwater Dependent Ecosystems Atlas

Type	Name	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Aquatic	DJERRIWARRH CREEK	High potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	River	Unconsolidated sedimentary	0m	On-site
Terrestrial		High potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		Moderate potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		Moderate potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		Moderate potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m	On-site
Terrestrial		Moderate potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Fractured rock	16m	South East
Aquatic	PYRITES CREEK	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Consolidated sedimentary	105m	North West
Aquatic	PYRITES CREEK	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	150m	West
Terrestrial		High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	220m	West
Terrestrial		High potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Fractured rock	243m	South West
Aquatic	WERRIBEE RIVER	High potential GDE - from national assessment	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	River	Unconsolidated sedimentary	457m	South West
Aquatic	WERRIBEE RIVER	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	482m	West
Aquatic	DJERRIWARRH CREEK	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	551m	North East
Aquatic	LERDERDERG RIVER	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	836m	West
Terrestrial		Low potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	981m	North West
Terrestrial		High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	991m	North West

Inflow Dependent Ecosystems Likelihood

124 Hopetoun Park, Hopetoun Park, VIC 3188



Ecological Constraints

124 Hopetoun Park, Hopetoun Park, VIC 3188

Inflow Dependent Ecosystems Likelihood

Type	Name	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial		8	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m	On-site
Aquatic	DJERRIWARRH CREEK	10	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	River	Unconsolidated sedimentary	0m	On-site
Terrestrial		6	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		9	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		6	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		10	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Unconsolidated sedimentary	0m	On-site
Terrestrial		9	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m	On-site
Terrestrial		10	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	6m	West
Terrestrial		8	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Fractured rock	16m	South East
Terrestrial		10	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	27m	West
Terrestrial		5	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	103m	East
Aquatic	PYRITES CREEK	10	Moderately high plateaus and strike ridges.	River	Consolidated sedimentary	105m	North West
Terrestrial		9	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Fractured rock	118m	East
Aquatic	PYRITES CREEK	10	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	150m	West
Terrestrial		8	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	176m	East
Terrestrial		10	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Vegetation	Fractured rock	243m	South West
Aquatic	WERRIBEE RIVER	10	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	River	Unconsolidated sedimentary	457m	South West
Aquatic	WERRIBEE RIVER	10	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	482m	West
Aquatic	DJERRIWARRH CREEK	10	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	551m	North East
Aquatic	LERDERDERG RIVER	10	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	836m	West
Terrestrial		7	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	981m	North West

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

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

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Appendix C – Planning Property Reports

PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:35 PM

PROPERTY DETAILS

Address:	**30 KYLE LANE HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 2 PS630818**
Standard Parcel Identifier (SPI):	**2\PS630818**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**420135**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 E8**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

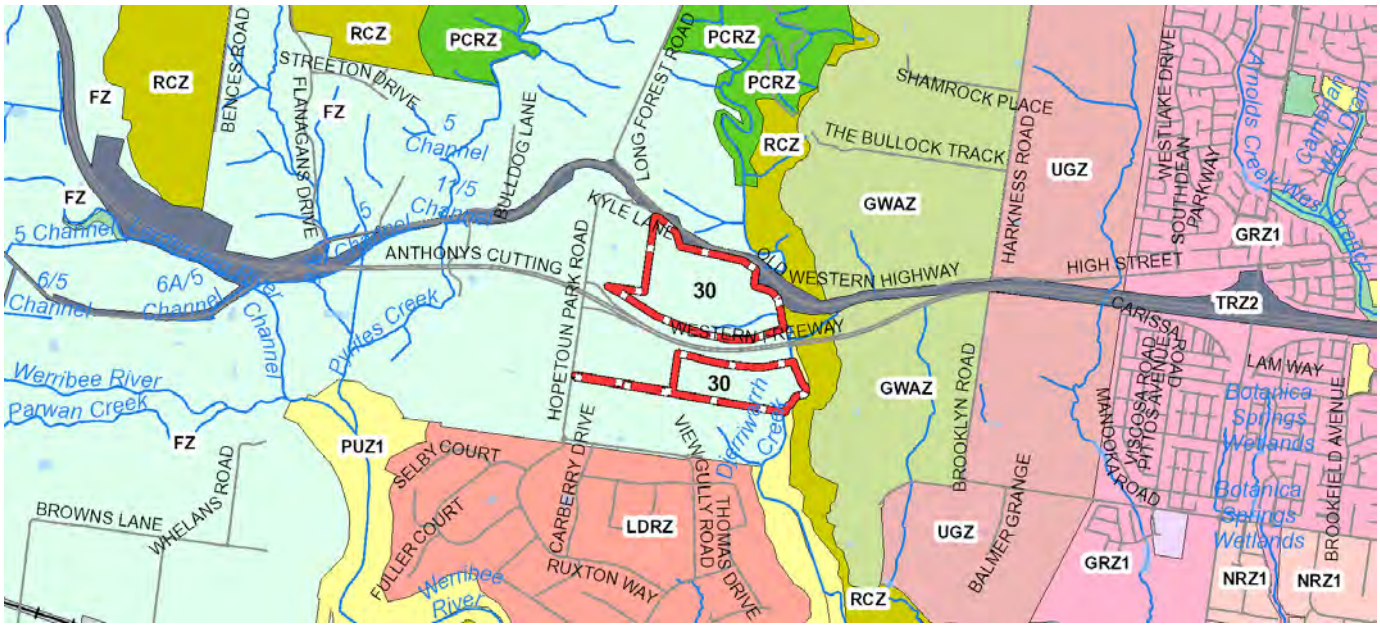
OTHER

Registered Aboriginal Party: **Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



C1Z - Commercial 1	FZ - Farming	GRZ - General Residential
GWAZ - Green Wedge A	LDRZ - Low Density Residential	NRZ - Neighbourhood Residential
PCRZ - Public Conservation and Resource	PPRZ - Public Park and Recreation	PUZ1 - Public Use-Service and Utility
PUZ2 - Public Use-Education	PUZ3 - Public Use-Health & Community	RCZ - Rural Conservation
TRZ1 - State Transport Infrastructure	TRZ2 - Principal Road Network	TRZ3 - Significant Municipal Road
UGZ - Urban Growth	Railway line	Water area
Water course		

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

PLANNING PROPERTY REPORT

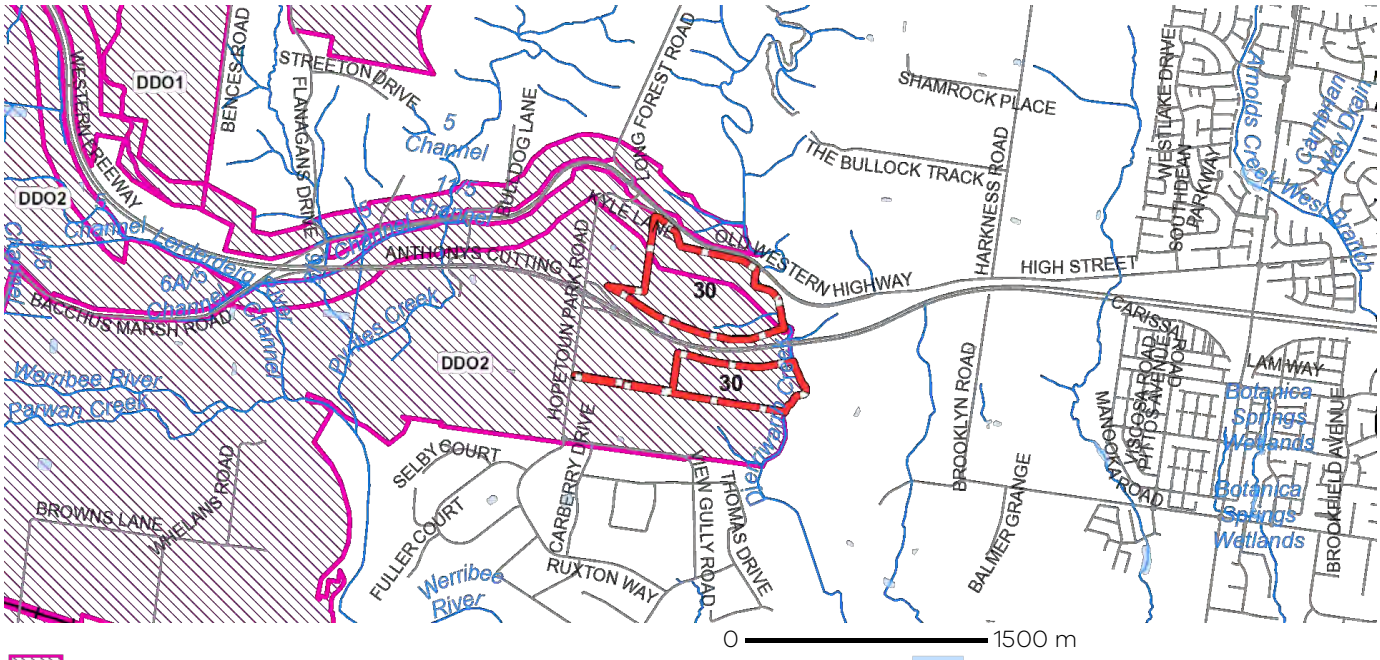
Environment, Land, Water and Planning

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)

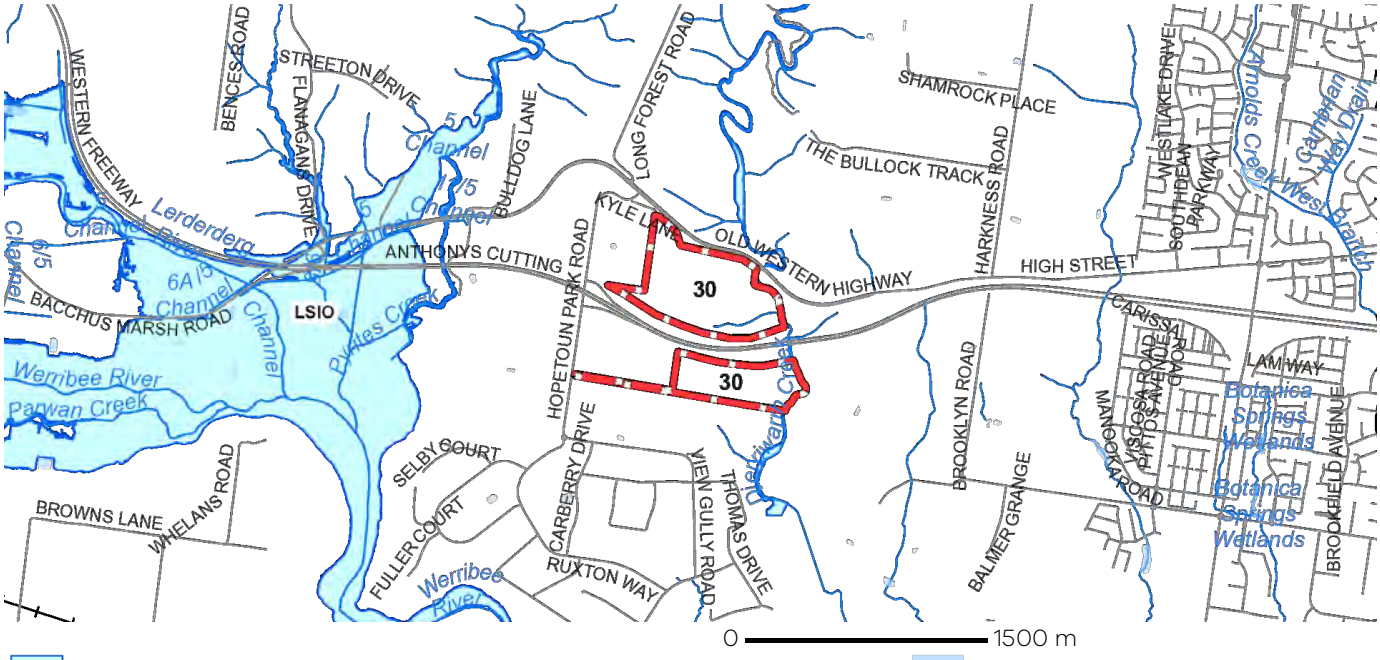
DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 3 (DDO3) (MOORABOOL)



DDO - Design and Development Overlay | Railway line | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

LAND SUBJECT TO INUNDATION OVERLAY (LSIO) (MOORABOOL)



LSIO - Land Subject to Inundation Overlay | Railway line | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

PLANNING PROPERTY REPORT

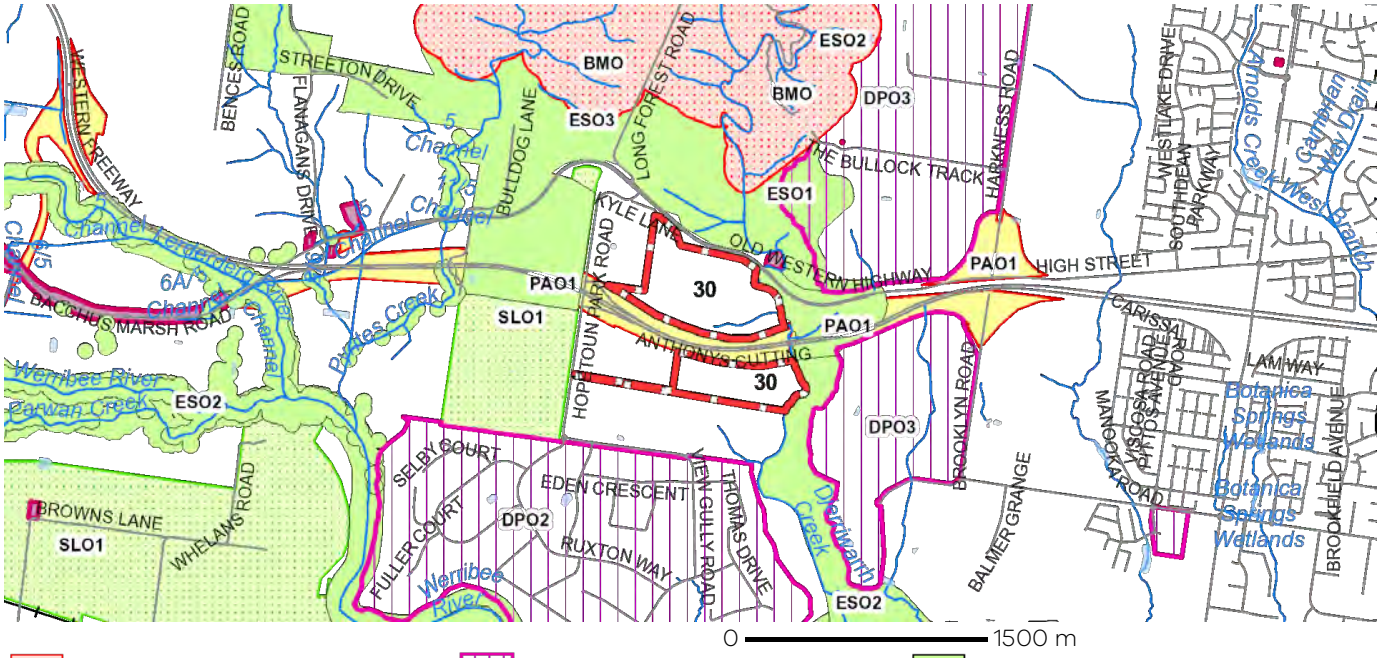
Environment, Land, Water and Planning

Planning Overlays

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

BUSHFIRE MANAGEMENT OVERLAY (BMO) (MELTON)
BUSHFIRE MANAGEMENT OVERLAY (BMO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MOORABOOL)
HERITAGE OVERLAY (HO) (MOORABOOL)
HERITAGE OVERLAY (HO) (MELTON)
PUBLIC ACQUISITION OVERLAY (PAO) (MELTON)
PUBLIC ACQUISITION OVERLAY (PAO) (MOORABOOL)
SIGNIFICANT LANDSCAPE OVERLAY (SLO) (MOORABOOL)



BMO - Bushfire Management Overlay | **DPO - Development Plan Overlay** | **ESO - Environmental Significance Overlay**
HO - Heritage Overlay | **PAO - Public Acquisition Overlay** | **SLO - Significant Landscape Overlay**
Railway line | **Water area** | **Water course**

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

PLANNING PROPERTY REPORT

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

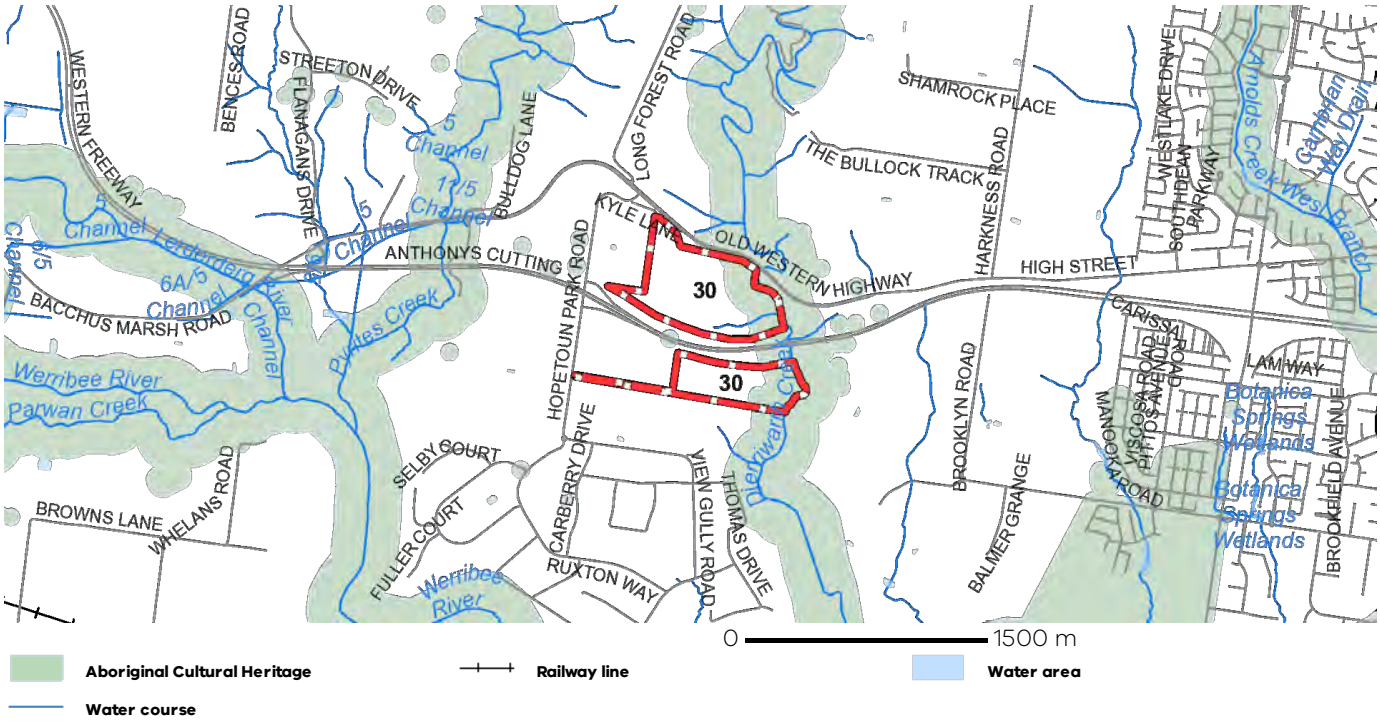
Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to http://www.aav.nrms.net.au/aavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation



PLANNING PROPERTY REPORT

Further Planning Information

Planning scheme data last updated on 15 June 2022.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.
This report provides information about the zone and overlay provisions that apply to the selected land.
Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting https://www.planning.vic.gov.au

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the ***Planning and Environment Act 1987.***
It does not include information about exhibited planning scheme amendments, or zonings that may abut the land.
To obtain a Planning Certificate go to Titles and Property Certificates at Landata - https://www.landata.vic.gov.au

For details of surrounding properties, use this service to get the Reports for properties of interest.

To view planning zones, overlay and heritage information in an interactive format visit https://mapshare.maps.vic.gov.au/vicplan

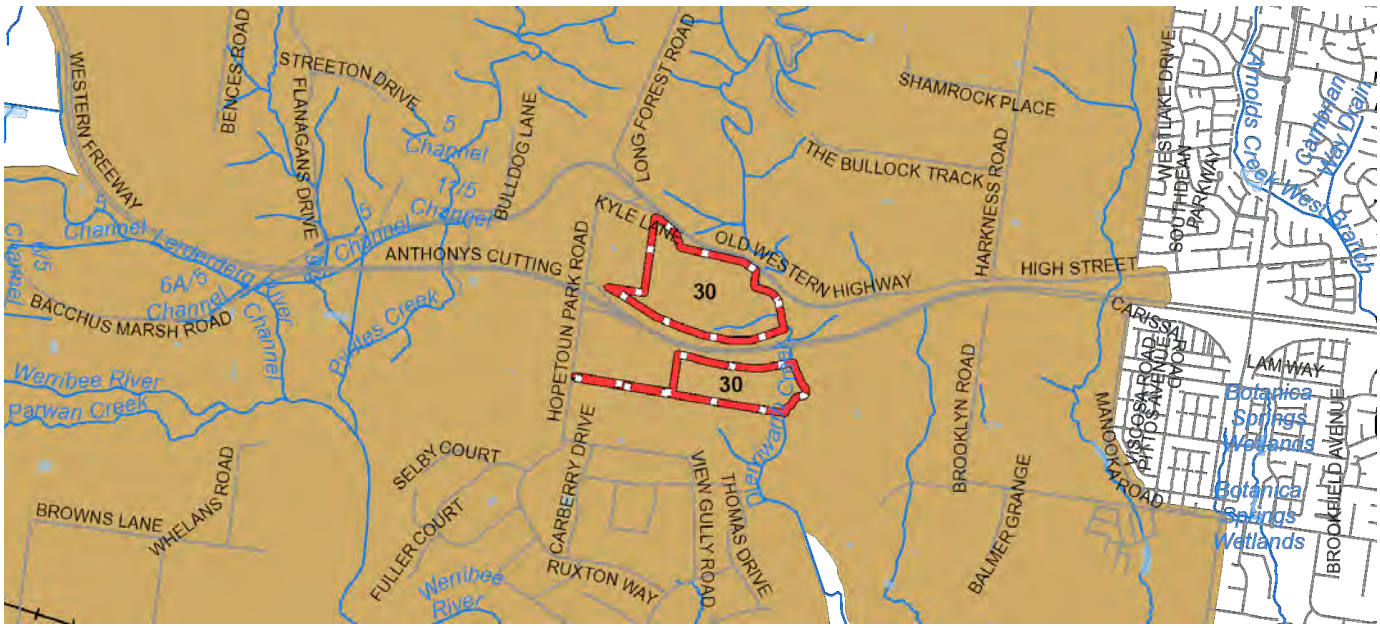
For other information about planning in Victoria visit https://www.planning.vic.gov.au

PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Designated Bushfire Prone Areas

This property is in a designated bushfire prone area.
Special bushfire construction requirements apply. Planning provisions may apply.



Designated bushfire prone areas as determined by the Minister for Planning are in effect from 8 September 2011 and amended from time to time.

The Building Regulations 2018 through application of the Building Code of Australia, apply bushfire protection standards for building works in designated bushfire prone areas.

Designated bushfire prone areas maps can be viewed on VicPlan at https://mapshare.maps.vic.gov.au/vicplan or at the relevant local council.

Note: prior to 8 September 2011, the whole of Victoria was designated as bushfire prone area for the purposes of the building control system.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au

Copies of the Building Act and Building Regulations are available from http://www.legislation.vic.gov.au

For Planning Scheme Provisions in bushfire areas visit https://www.planning.vic.gov.au

Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see Native Vegetation (Clause 52.17) with local variations in Native Vegetation (Clause 52.17) Schedule

To help identify native vegetation on this property and the application of Clause 52.17 please visit the Native Vegetation Information Management system https://nvim.delwp.vic.gov.au/ and Native vegetation (environment.vic.gov.au) or please contact your relevant council.

You can find out more about the natural values on your property through NatureKit NatureKit (environment.vic.gov.au)

PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:33 PM

PROPERTY DETAILS

Address:	**97 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 3 PS630818**
Standard Parcel Identifier (SPI):	**3\PS630818**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401150**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 C10**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

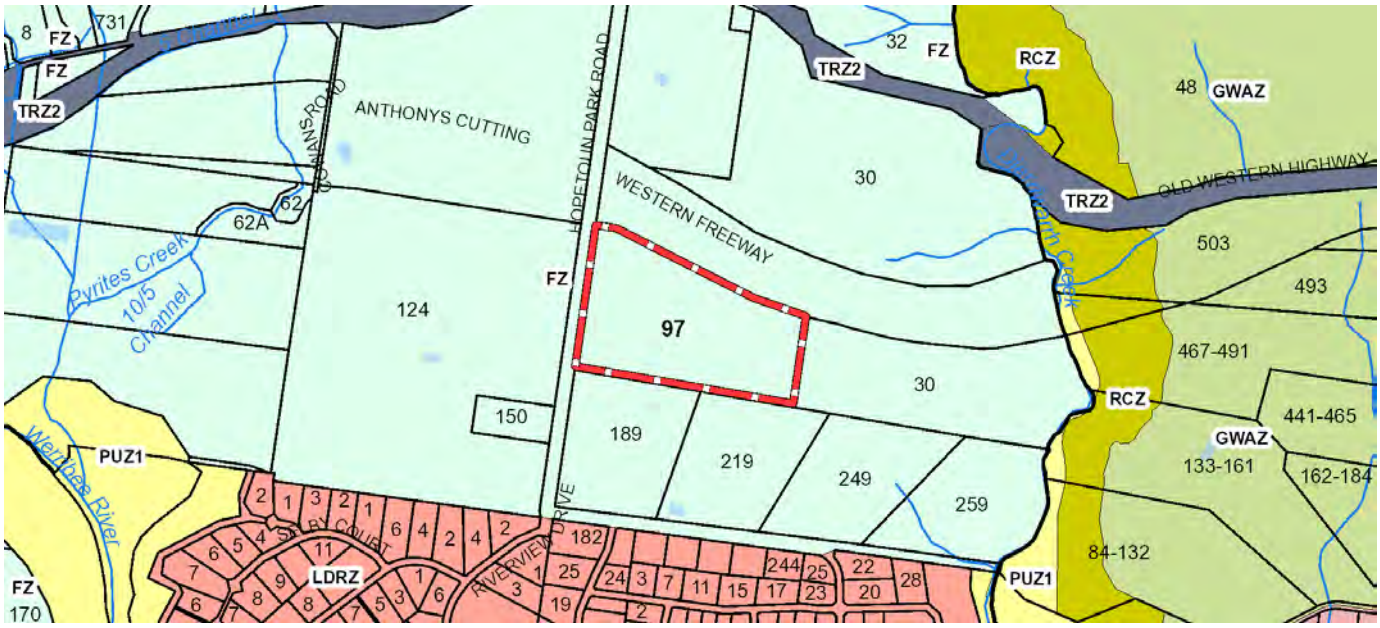
OTHER

Registered Aboriginal Party:	**Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



FZ - Farming	GWAZ - Green Wedge A	LDRZ - Low Density Residential
PUZ1 - Public Use-Service and Utility	RCZ - Rural Conservation	TRZ2 - Principal Road Network
UGZ - Urban Growth	Water area	Water course

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

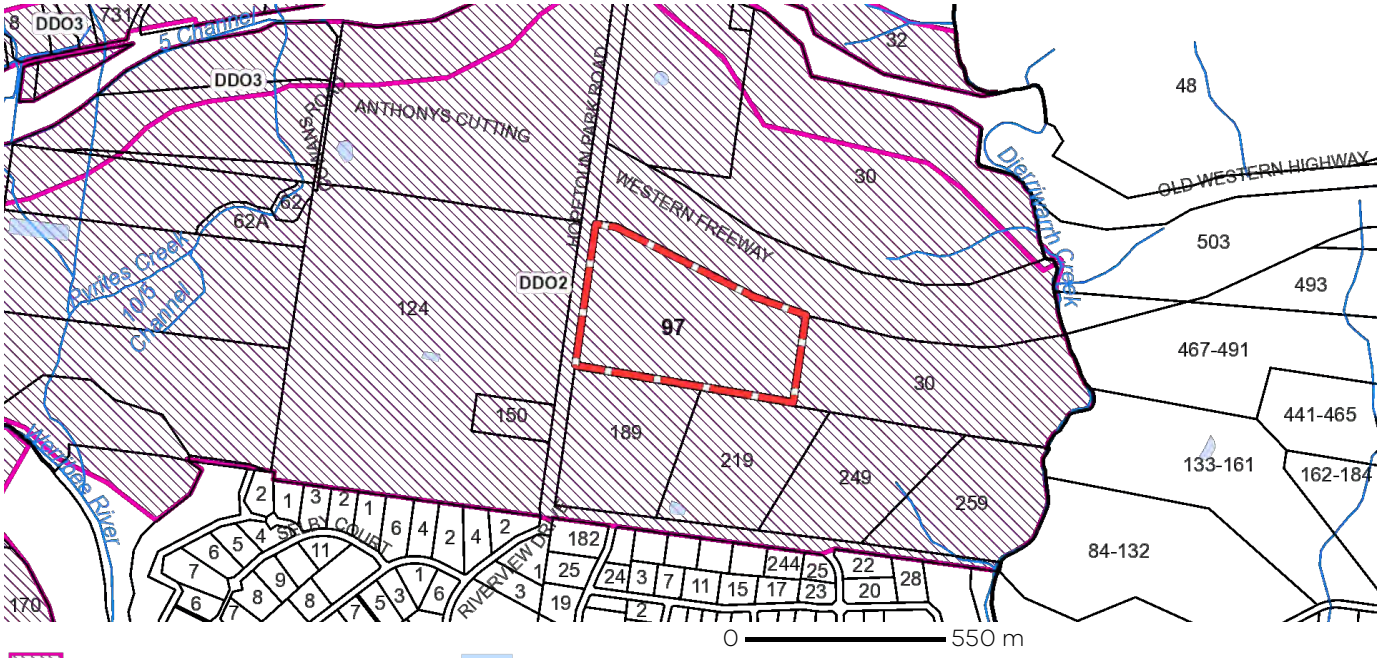
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)

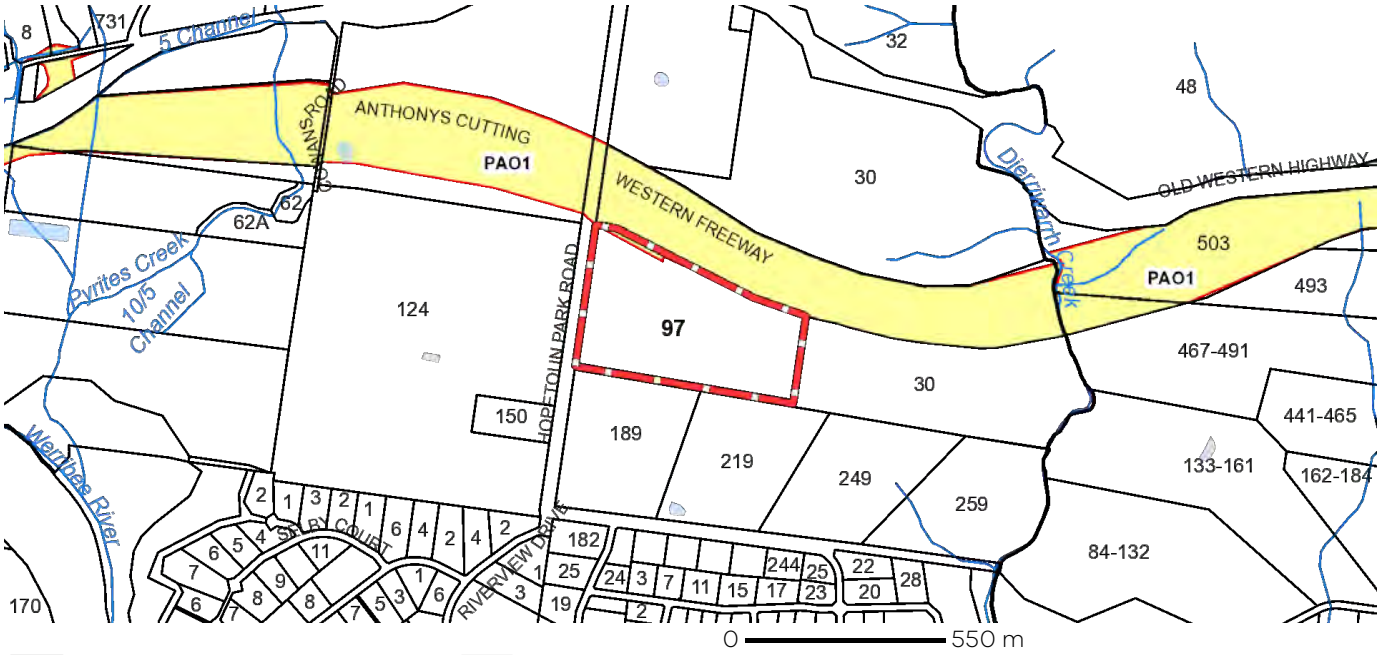


DDO - Design and Development Overlay | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

PUBLIC ACQUISITION OVERLAY (PAO) (MOORABOOL)

PUBLIC ACQUISITION OVERLAY 1 SCHEDULE (PAO1) (MOORABOOL)



PAO - Public Acquisition Overlay | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

PLANNING PROPERTY REPORT

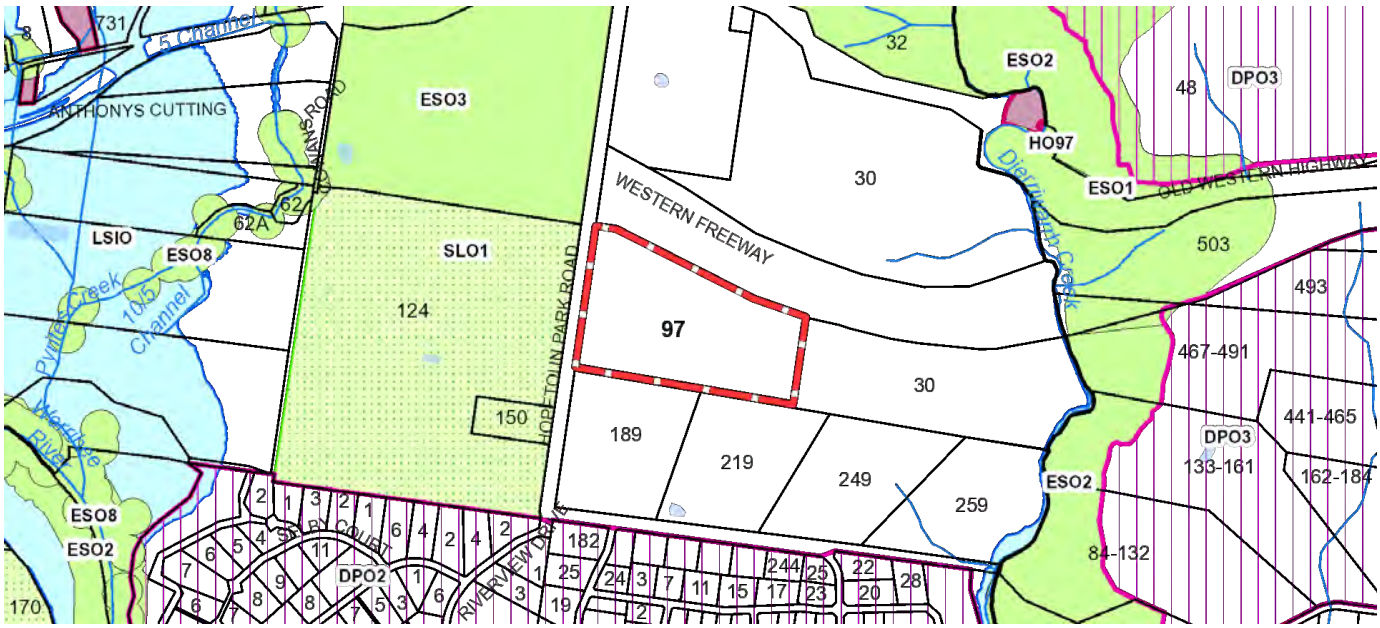
Environment, Land, Water and Planning

Planning Overlays

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

DEVELOPMENT PLAN OVERLAY (DPO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MOORABOOL)
HERITAGE OVERLAY (HO) (MOORABOOL)
HERITAGE OVERLAY (HO) (MELTON)
LAND SUBJECT TO INUNDATION OVERLAY (LSIO) (MOORABOOL)
SIGNIFICANT LANDSCAPE OVERLAY (SLO) (MOORABOOL)



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Further Planning Information

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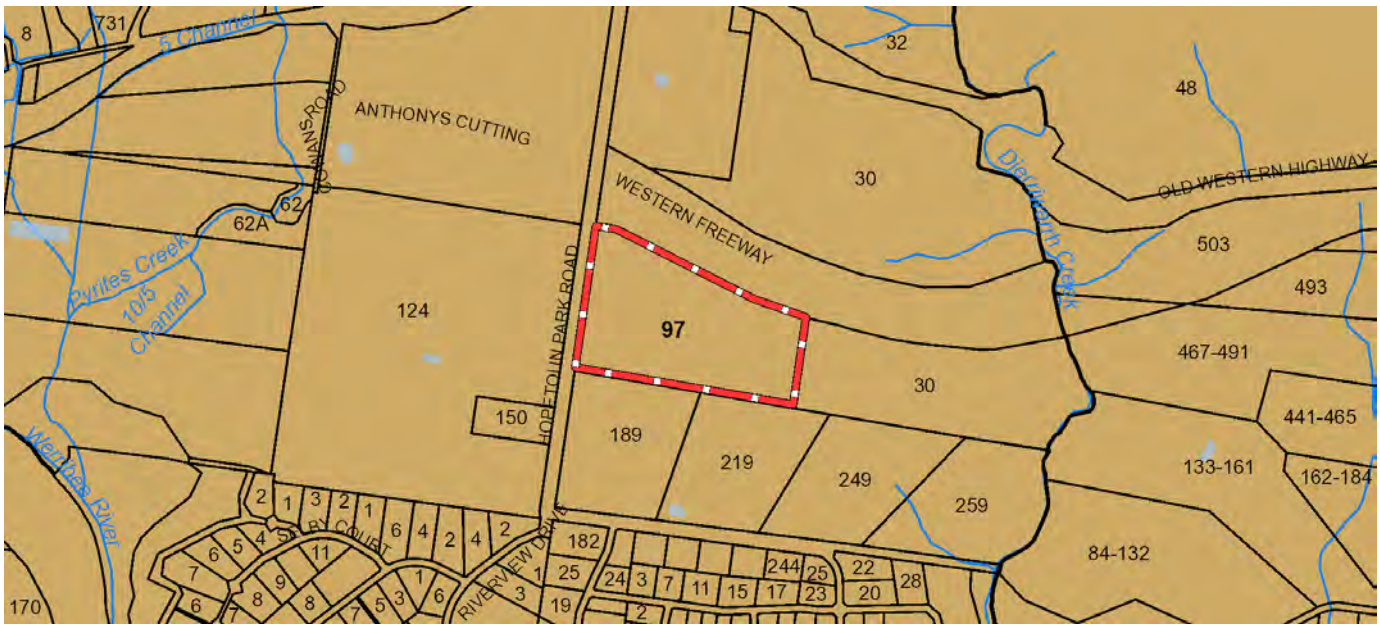
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Designated Bushfire Prone Areas

This property is in a designated bushfire prone area.
Special bushfire construction requirements apply. Planning provisions may apply.



Designated bushfire prone areas as determined by the Minister for Planning are in effect from 8 September 2011 and amended from time to time.

The Building Regulations 2018 through application of the Building Code of Australia, apply bushfire protection standards for building works in designated bushfire prone areas.

Designated bushfire prone areas maps can be viewed on VicPlan at https://mapshare.maps.vic.gov.au/vicplan or at the relevant local council.

Note: prior to 8 September 2011, the whole of Victoria was designated as bushfire prone area for the purposes of the building control system.

Further information about the building control system and building in bushfire prone areas can be found on the Victorian Building Authority website https://www.vba.vic.gov.au

Copies of the Building Act and Building Regulations are available from http://www.legislation.vic.gov.au

For Planning Scheme Provisions in bushfire areas visit https://www.planning.vic.gov.au

Native Vegetation

Native plants that are indigenous to the region and important for biodiversity might be present on this property. This could include trees, shrubs, herbs, grasses or aquatic plants. There are a range of regulations that may apply including need to obtain a planning permit under Clause 52.17 of the local planning scheme. For more information see Native Vegetation (Clause 52.17) with local variations in Native Vegetation (Clause 52.17) Schedule

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:24 PM

PROPERTY DETAILS

Address:	**124 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**More than one parcel - see link below**
Standard Parcel Identifier (SPI):	**More than one parcel - see link below**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401750**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 C11**

This property has 3 parcels. For full parcel details get the free Property report at Property Reports

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

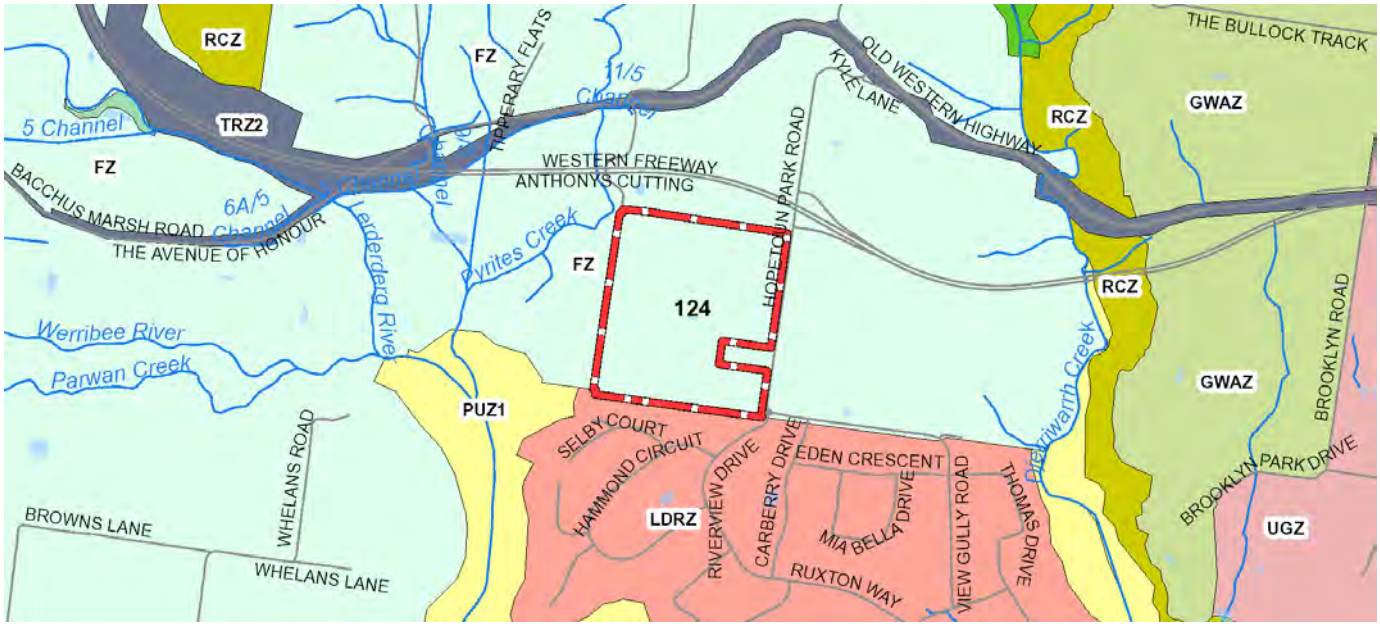
OTHER

Registered Aboriginal Party: **Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



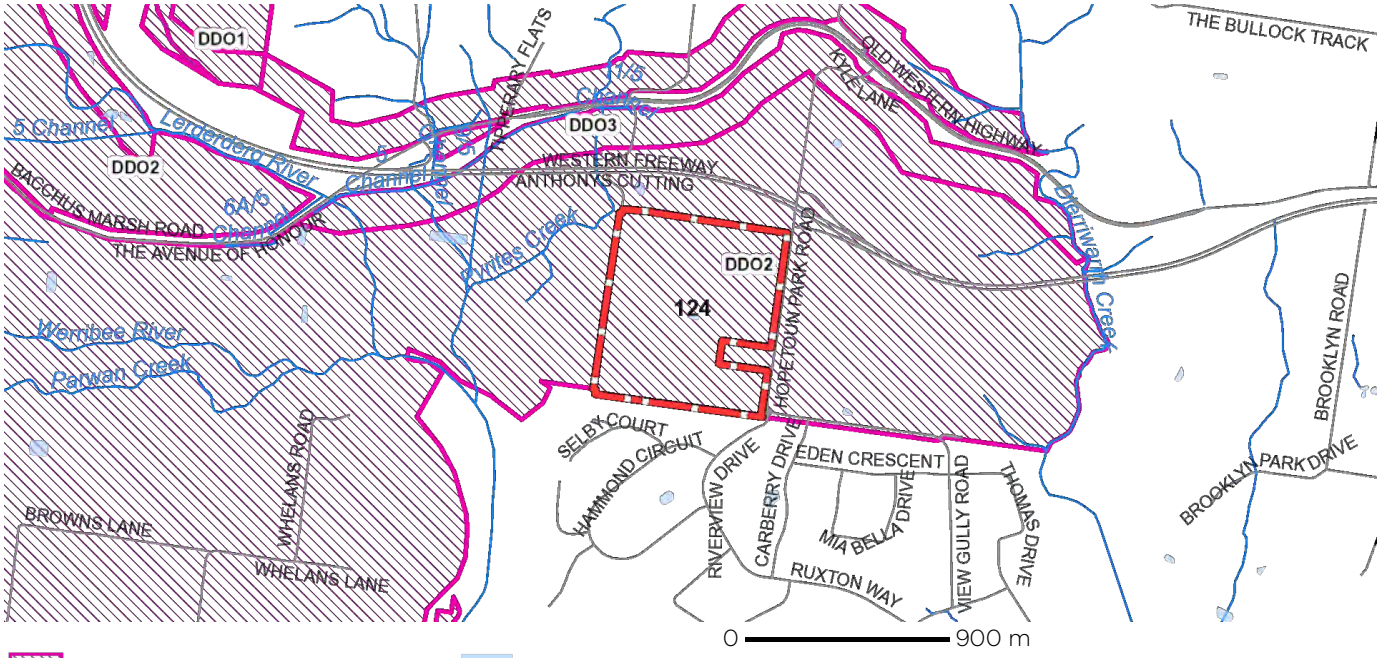
FZ - Farming	GWAZ - Green Wedge A	LDRZ - Low Density Residential
PCRZ - Public Conservation and Resource	PPRZ - Public Park and Recreation	PUZ1 - Public Use-Service and Utility
RCZ - Rural Conservation	TRZ2 - Principal Road Network	UGZ - Urban Growth
Water area	Water course	

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)

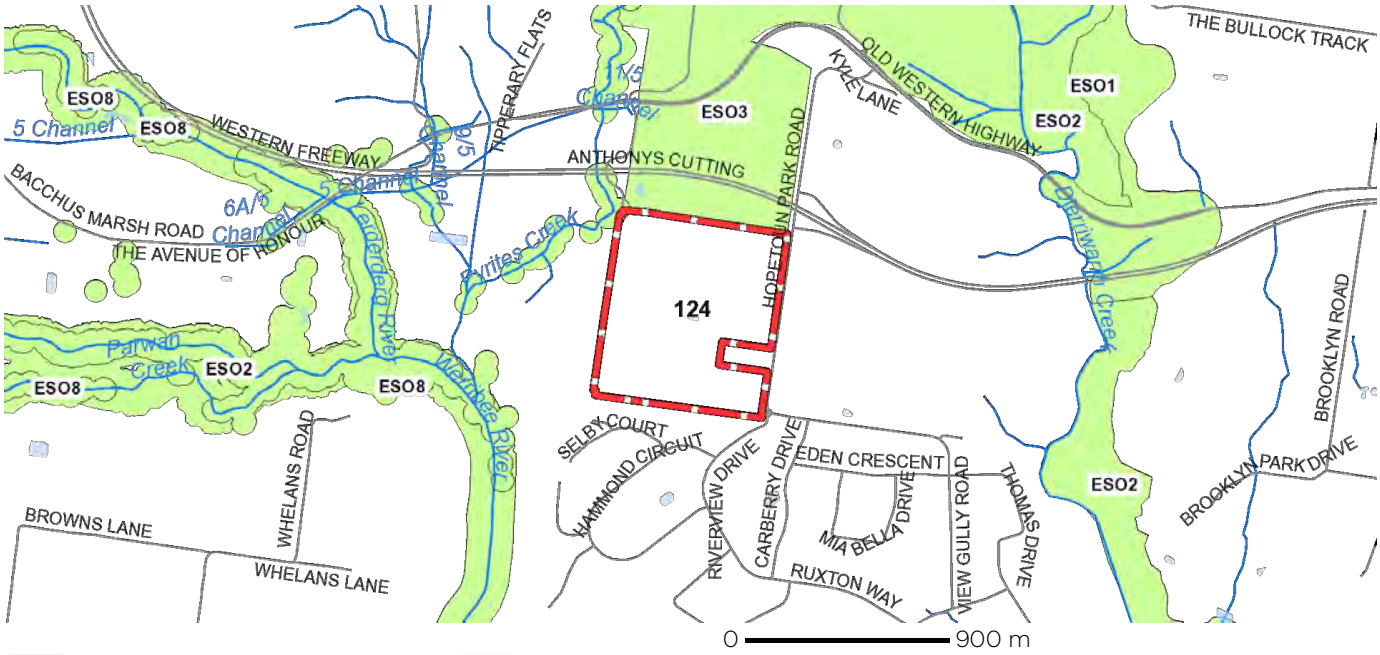


DDO - Design and Development Overlay **Water area** **Water course**

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MOORABOOL)

ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 8 (ESO8) (MOORABOOL)



ESO - Environmental Significance Overlay **Water area** **Water course**

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

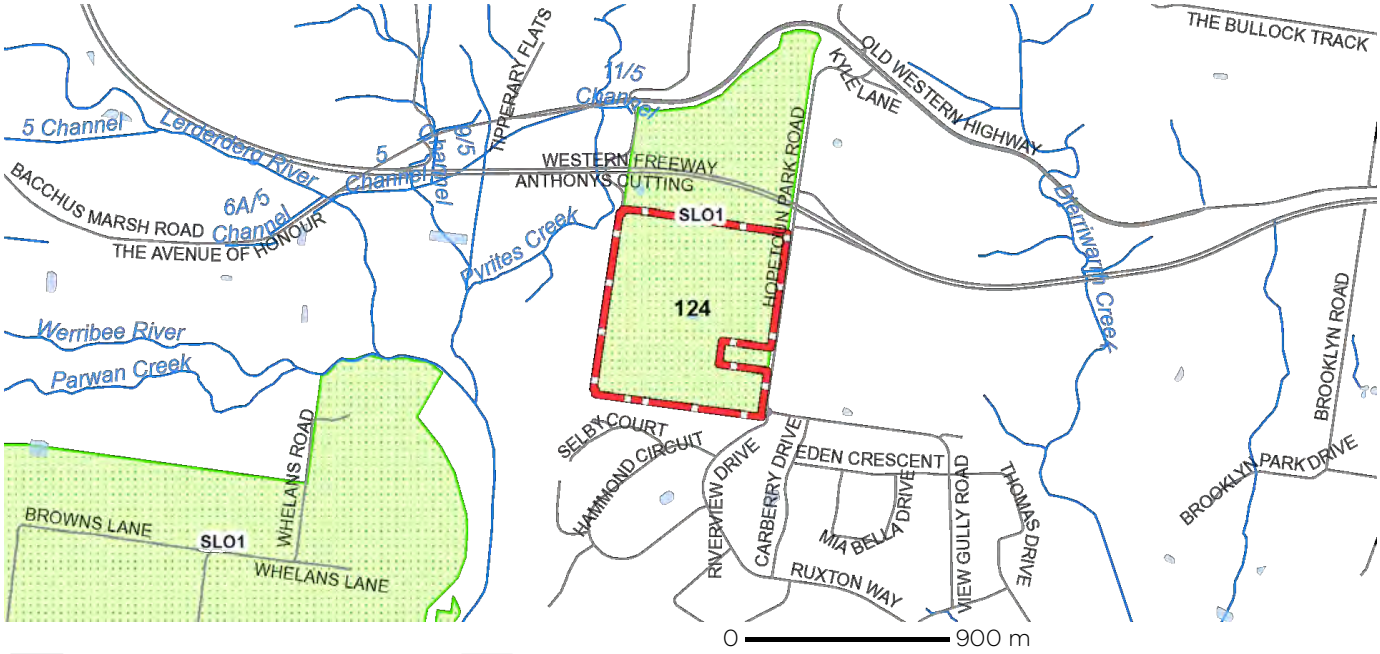
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

SIGNIFICANT LANDSCAPE OVERLAY (SLO) (MOORABOOL)

SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 1 (SLO1) (MOORABOOL)



SLO - Significant Landscape Overlay | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

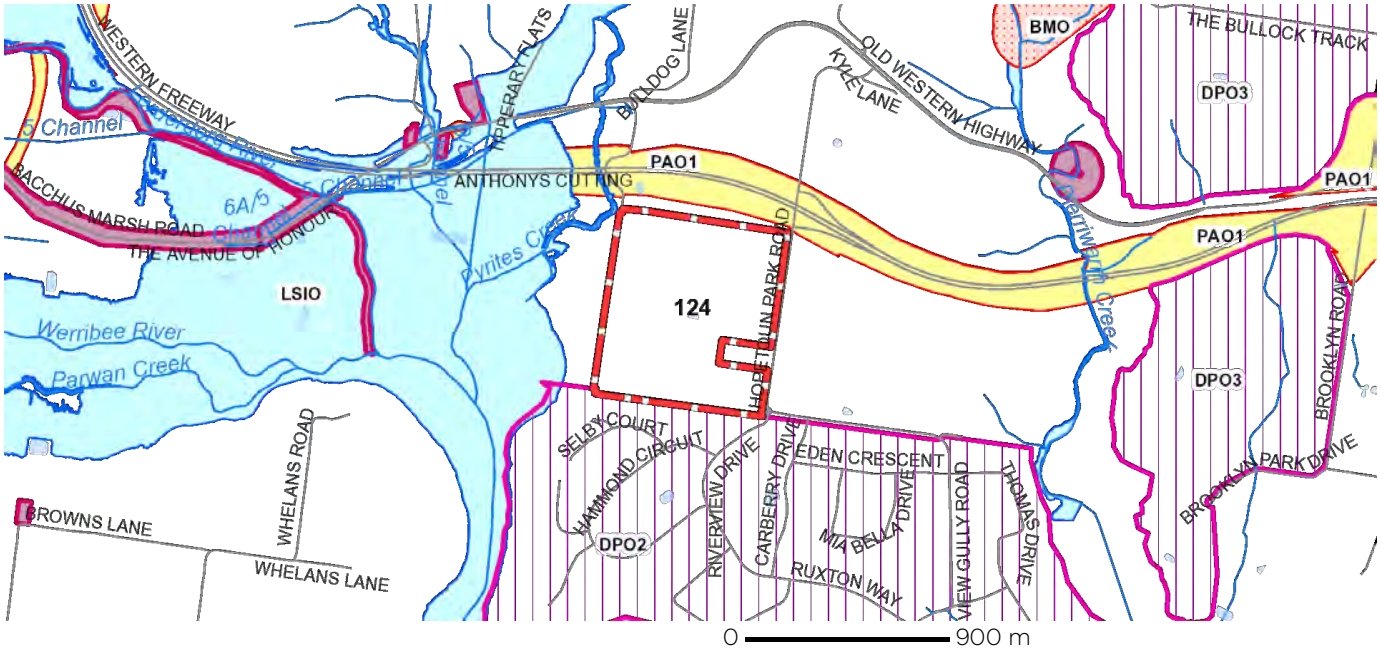
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

BUSHFIRE MANAGEMENT OVERLAY (BMO) (MELTON)
BUSHFIRE MANAGEMENT OVERLAY (BMO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MELTON)
HERITAGE OVERLAY (HO) (MOORABOOL)
HERITAGE OVERLAY (HO) (MELTON)
LAND SUBJECT TO INUNDATION OVERLAY (LSIO) (MOORABOOL)
PUBLIC ACQUISITION OVERLAY (PAO) (MELTON)
PUBLIC ACQUISITION OVERLAY (PAO) (MOORABOOL)



BMO - Bushfire Management Overlay
DPO - Development Plan Overlay
HO - Heritage Overlay
LSIO - Land Subject to Inundation Overlay
PAO - Public Acquisition Overlay
Water area
Water course

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

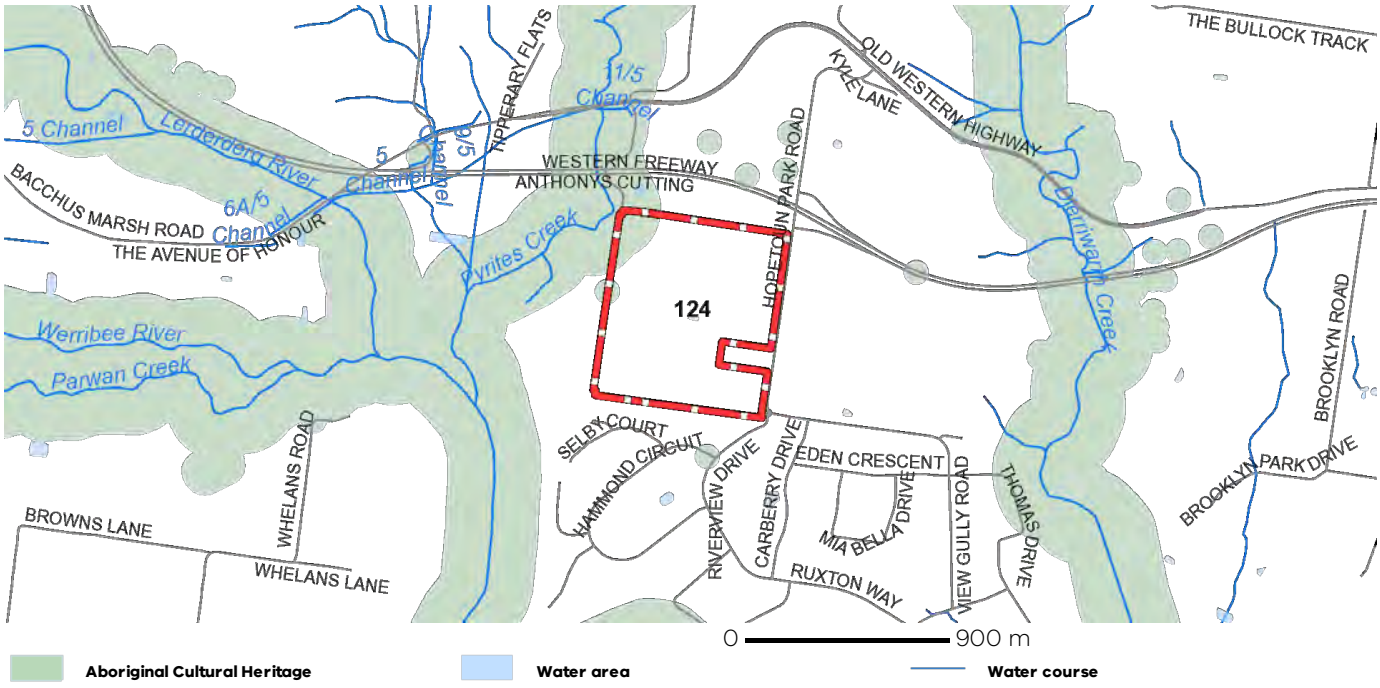
Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to http://www.aav.nrms.net.au/aavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation



PLANNING PROPERTY REPORT

Further Planning Information

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Designated Bushfire Prone Areas

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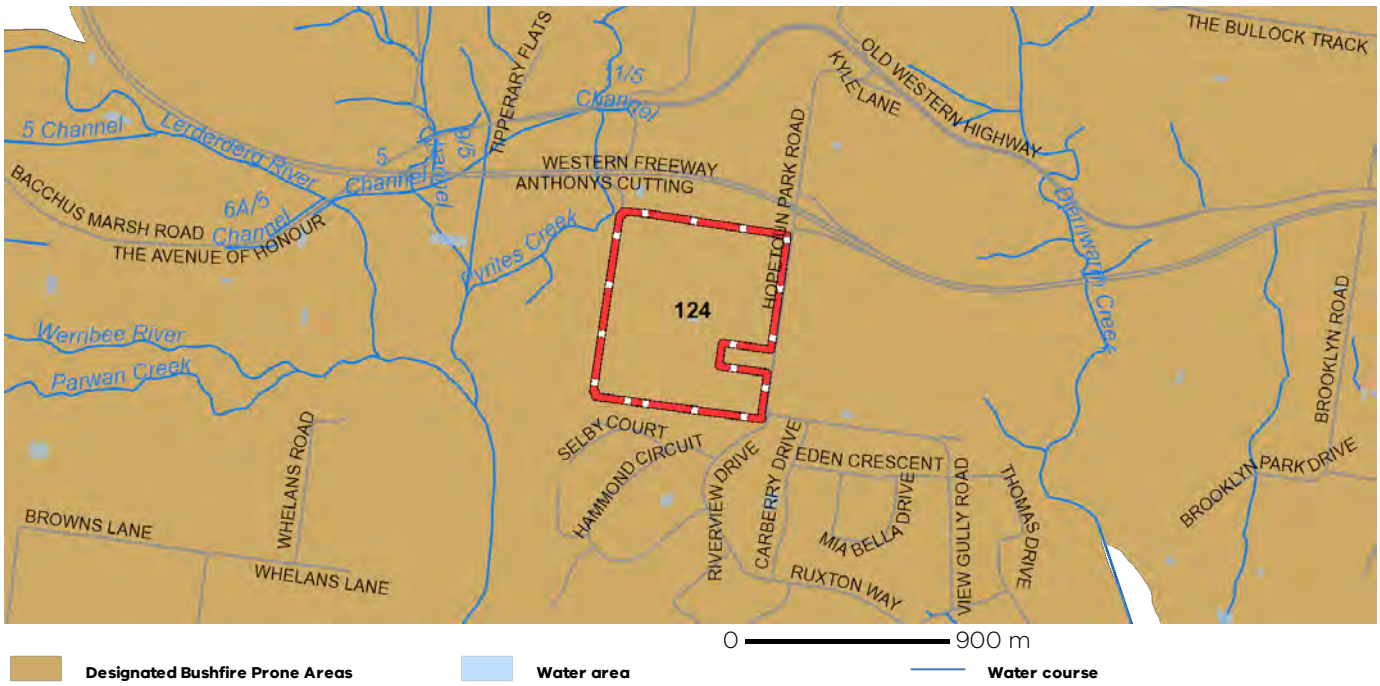

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:26 PM

PROPERTY DETAILS

Address:	**150 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 1 PS604556**
Standard Parcel Identifier (SPI):	**1\PS604556**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401755**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 C11**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

OTHER

Registered Aboriginal Party:	**Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ)

FZ - Farming LDRZ - Low Density Residential Water area

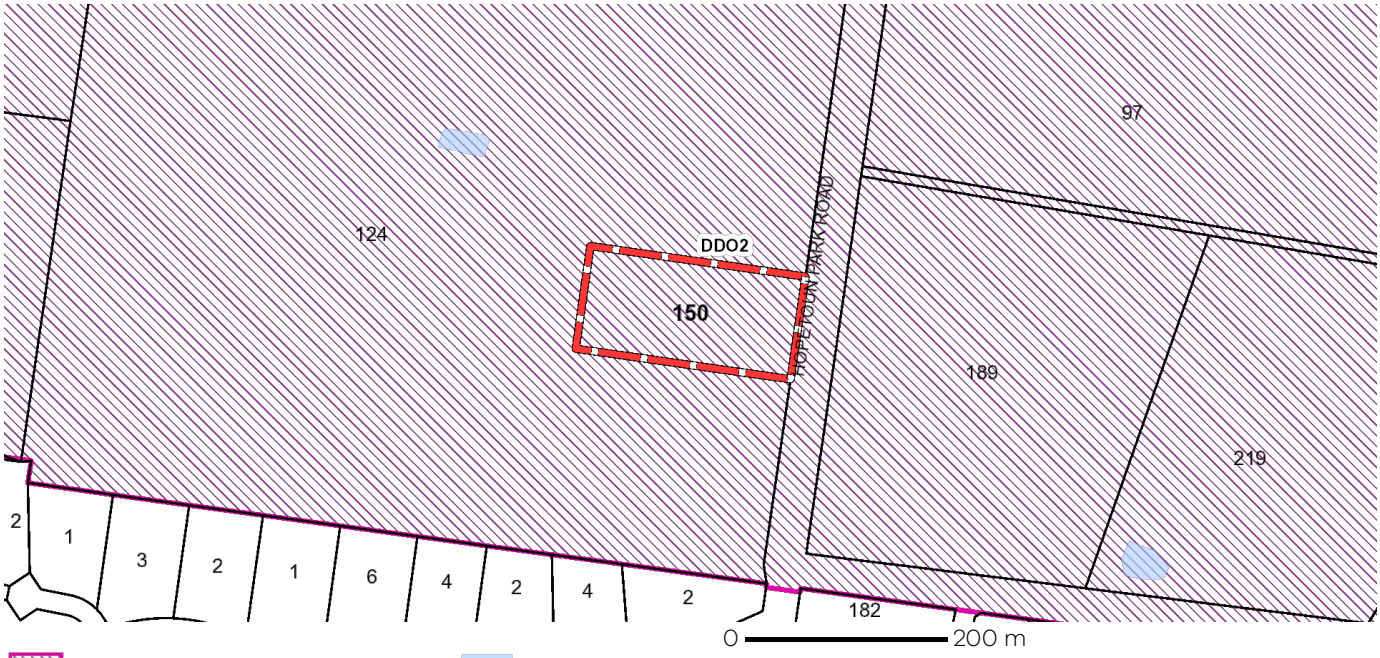
Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

PLANNING PROPERTY REPORT

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2)



DDO - Design and Development Overlay Water area

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SIGNIFICANT LANDSCAPE OVERLAY (SLO)

SIGNIFICANT LANDSCAPE OVERLAY - SCHEDULE 1 (SLO1)

SLO - Significant Landscape Overlay Water area

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PLANNING PROPERTY REPORT

Planning Overlays

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

DEVELOPMENT PLAN OVERLAY (DPO)

DPO - Development Plan Overlay

Water area

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Further Planning Information

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PLANNING PROPERTY REPORT

Designated Bushfire Prone Areas

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:33 PM

PROPERTY DETAILS

Address:	**189 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 1 LP145516**
Standard Parcel Identifier (SPI):	**1\LP145516**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401250**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 D12**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

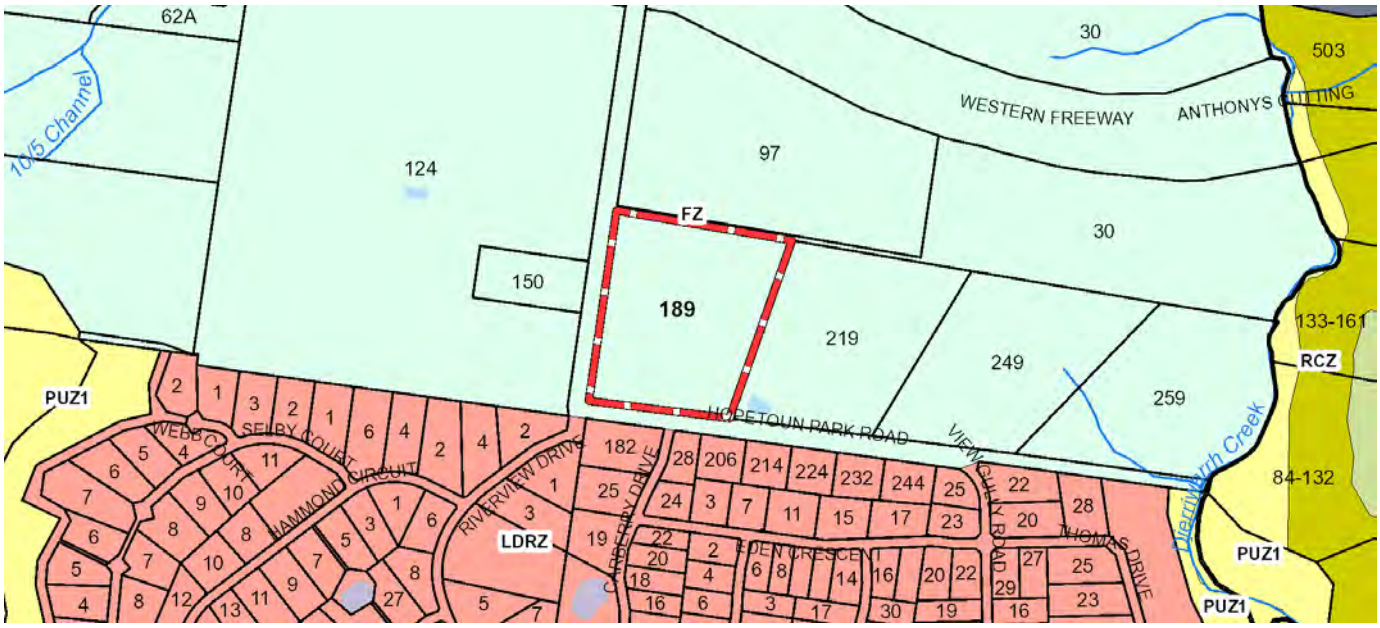
OTHER

Registered Aboriginal Party: **Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



FZ - Farming	GWAZ - Green Wedge A	LDRZ - Low Density Residential
PUZ1 - Public Use-Service and Utility	RCZ - Rural Conservation	TRZ2 - Principal Road Network
Water area	Water course	

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

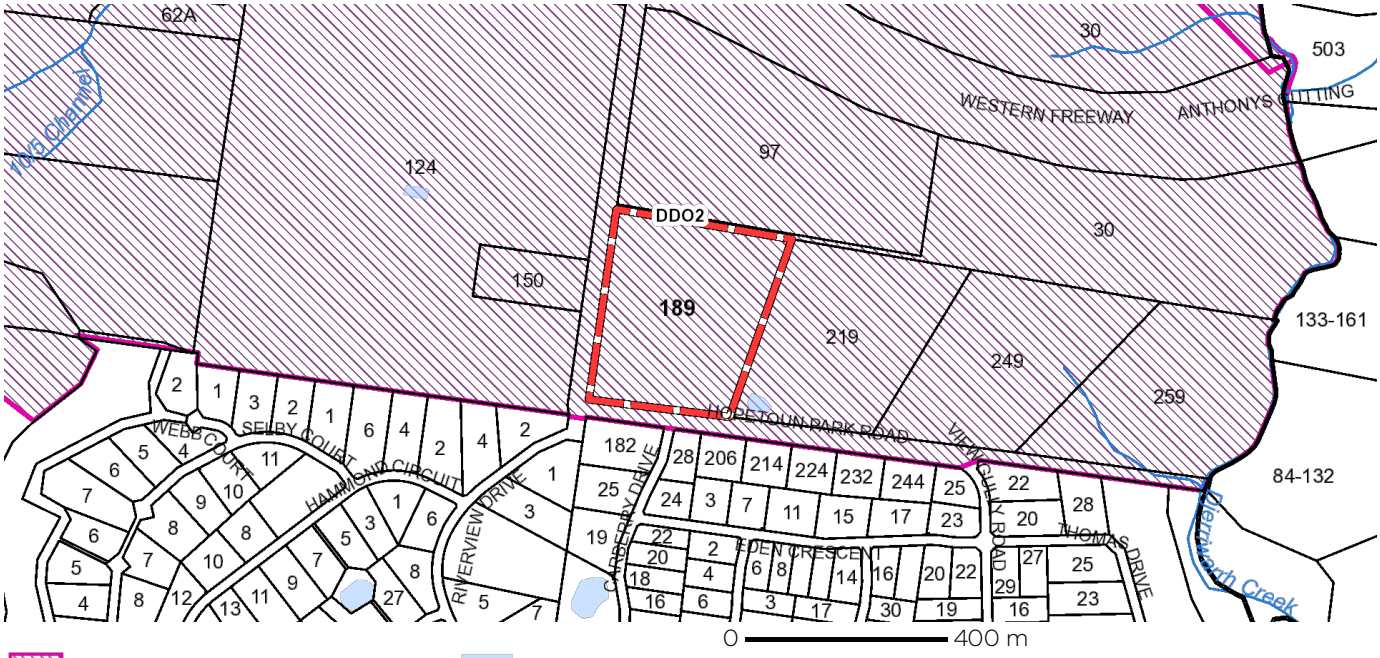
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)



DDO - Design and Development Overlay **Water area** **Water course**

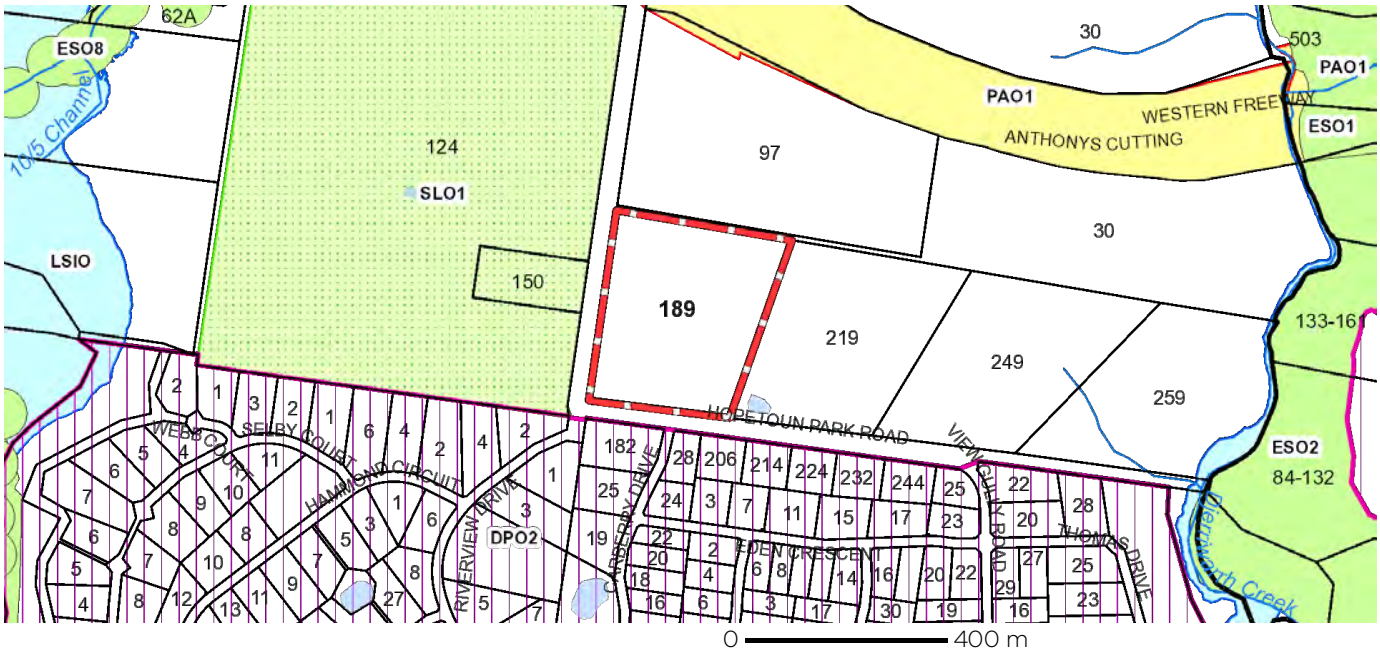
Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

PLANNING PROPERTY REPORT

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

DEVELOPMENT PLAN OVERLAY (DPO) (MOORABOOL)
DEVELOPMENT PLAN OVERLAY (DPO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MELTON)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO) (MOORABOOL)
LAND SUBJECT TO INUNDATION OVERLAY (LSIO) (MOORABOOL)
PUBLIC ACQUISITION OVERLAY (PAO) (MELTON)
PUBLIC ACQUISITION OVERLAY (PAO) (MOORABOOL)
SIGNIFICANT LANDSCAPE OVERLAY (SLO) (MOORABOOL)



DPO - Development Plan Overlay
ESO - Environmental Significance Overlay
LSIO - Land Subject to Inundation Overlay
PAO - Public Acquisition Overlay
SLO - Significant Landscape Overlay
Water area
Water course

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Further Planning Information

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PLANNING PROPERTY REPORT

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:34 PM

PROPERTY DETAILS

Address:	**219 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 2 LP145516**
Standard Parcel Identifier (SPI):	**2\LP145516**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401300**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 D12**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

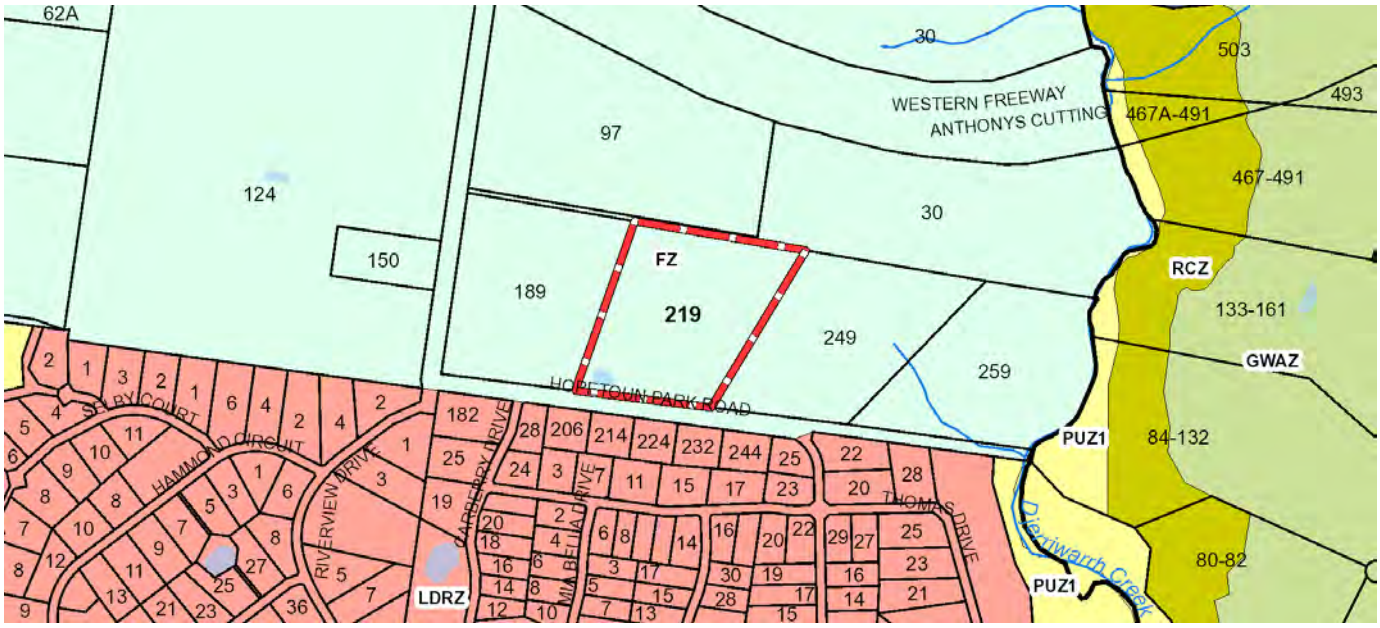
OTHER

Registered Aboriginal Party:	**Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

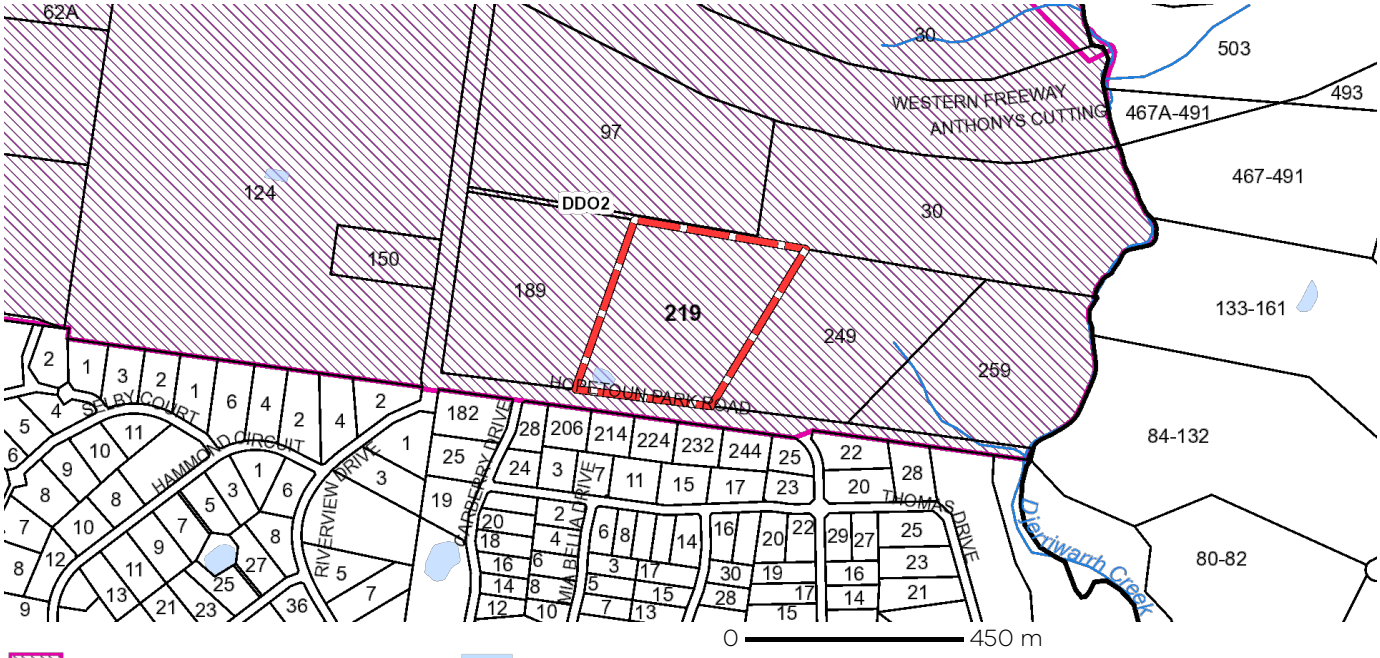
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)



DDO - Design and Development Overlay | Water area | Water course

Note: due to overlaps, some overlays may not be visible, and some colours may not match those in the legend

OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

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PUBLIC ACQUISITION OVERLAY (PAO) (MELTON)
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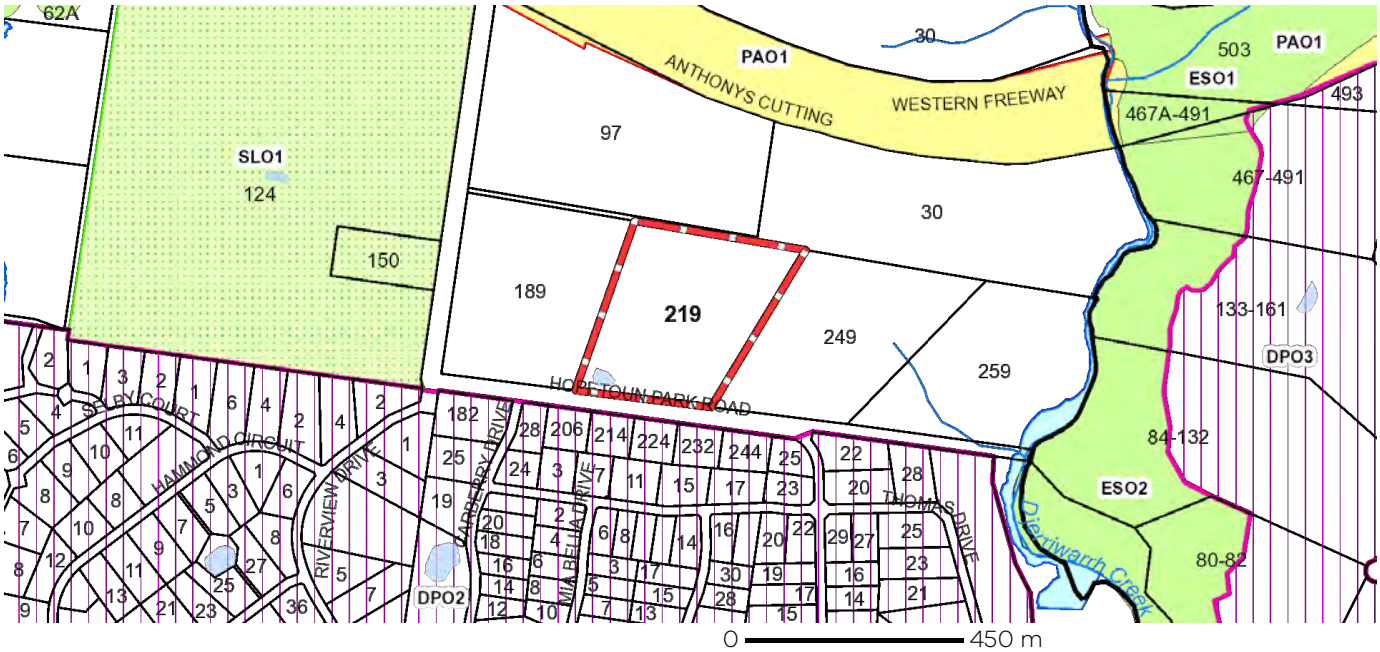

DPO - Development Plan Overlay
ESO - Environmental Significance Overlay
LSIO - Land Subject to Inundation Overlay
PAO - Public Acquisition Overlay
SLO - Significant Landscape Overlay
Water area
Water course

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Further Planning Information

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:34 PM

PROPERTY DETAILS

Address:	**249 HOPETOUN PARK ROAD HOPETOUN PARK 3340**
Lot and Plan Number:	**Lot 3 LP145516**
Standard Parcel Identifier (SPI):	**3\LP145516**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401350**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 E12**

UTILITIES

Rural Water Corporation:	**Southern Rural Water**
Urban Water Corporation:	**Western Water**
Melbourne Water:	**Inside drainage boundary**
Power Distributor:	**POWERCOR**

STATE ELECTORATES

Legislative Council:	**WESTERN VICTORIA**
Legislative Assembly:	**MELTON**

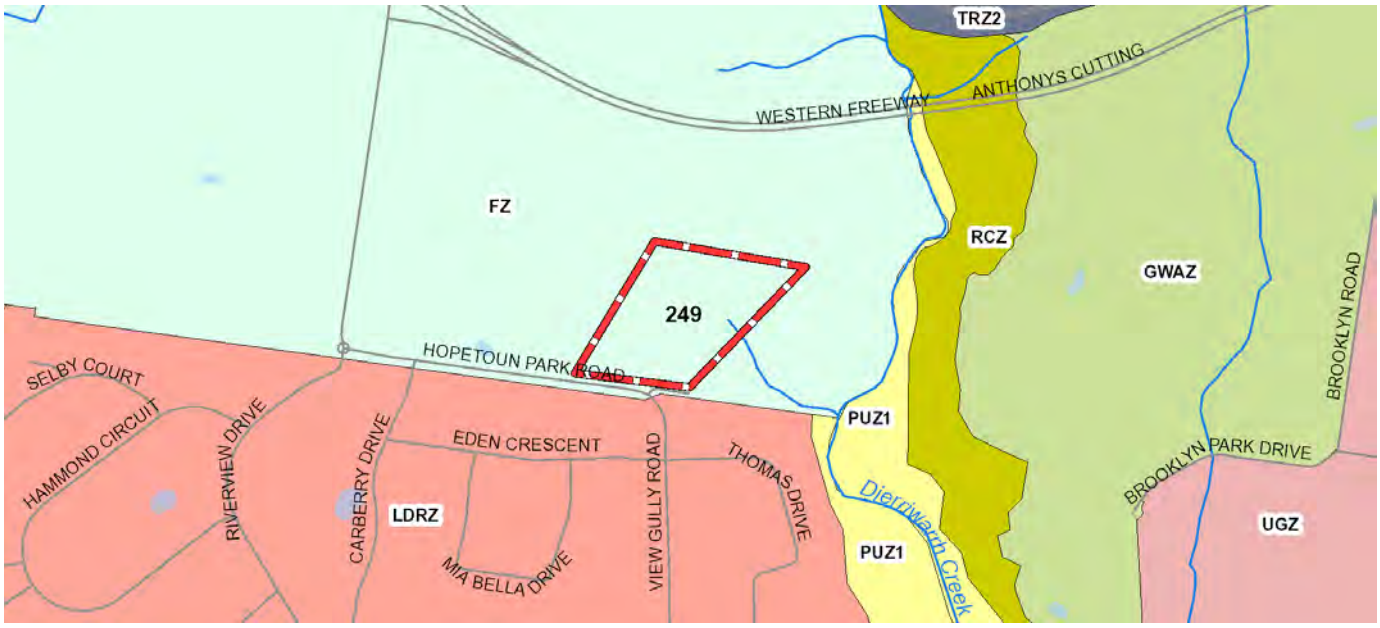
OTHER

Registered Aboriginal Party: **Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation**

View location in VicPlan

Planning Zones

FARMING ZONE (FZ) (MOORABOOL)



FZ - Farming	GWAZ - Green Wedge A	LDRZ - Low Density Residential
PUZ1 - Public Use-Service and Utility	RCZ - Rural Conservation	TRZ2 - Principal Road Network
UGZ - Urban Growth	Water area	Water course

Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

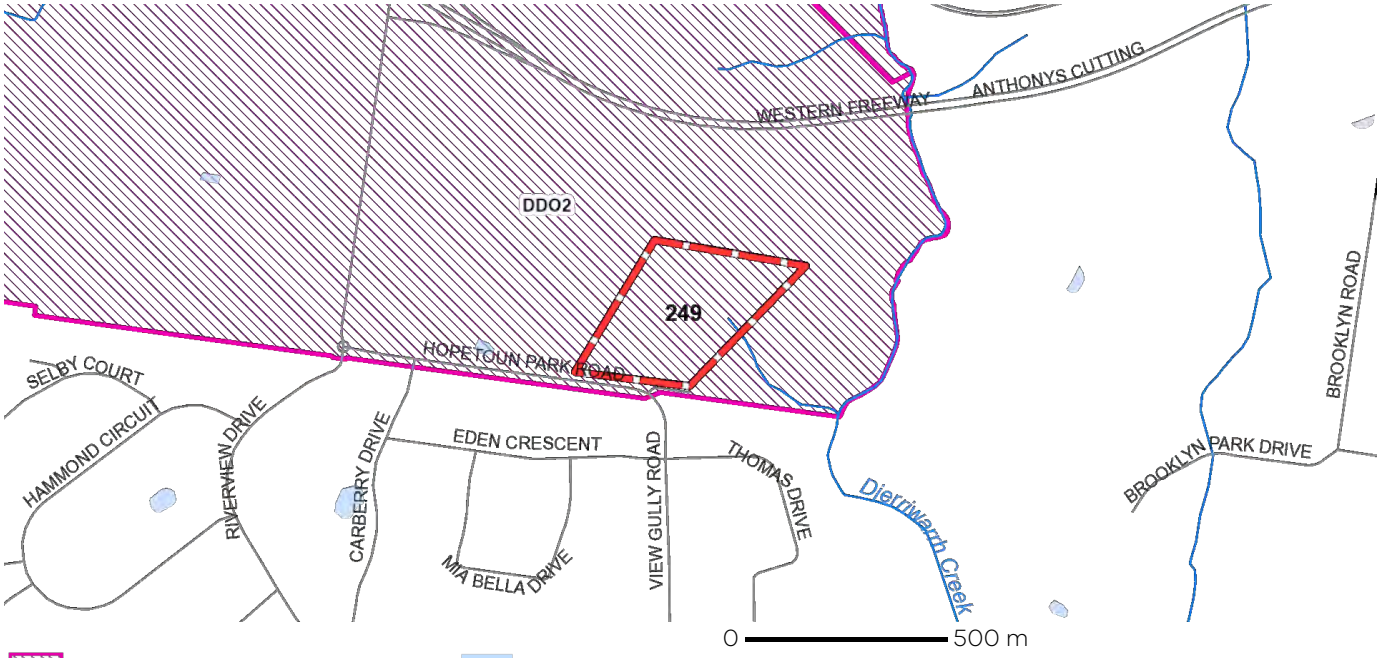
PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

DESIGN AND DEVELOPMENT OVERLAY (DDO) (MOORABOOL)

DESIGN AND DEVELOPMENT OVERLAY - SCHEDULE 2 (DDO2) (MOORABOOL)



DDO - Design and Development Overlay **Water area** **Water course**

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OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

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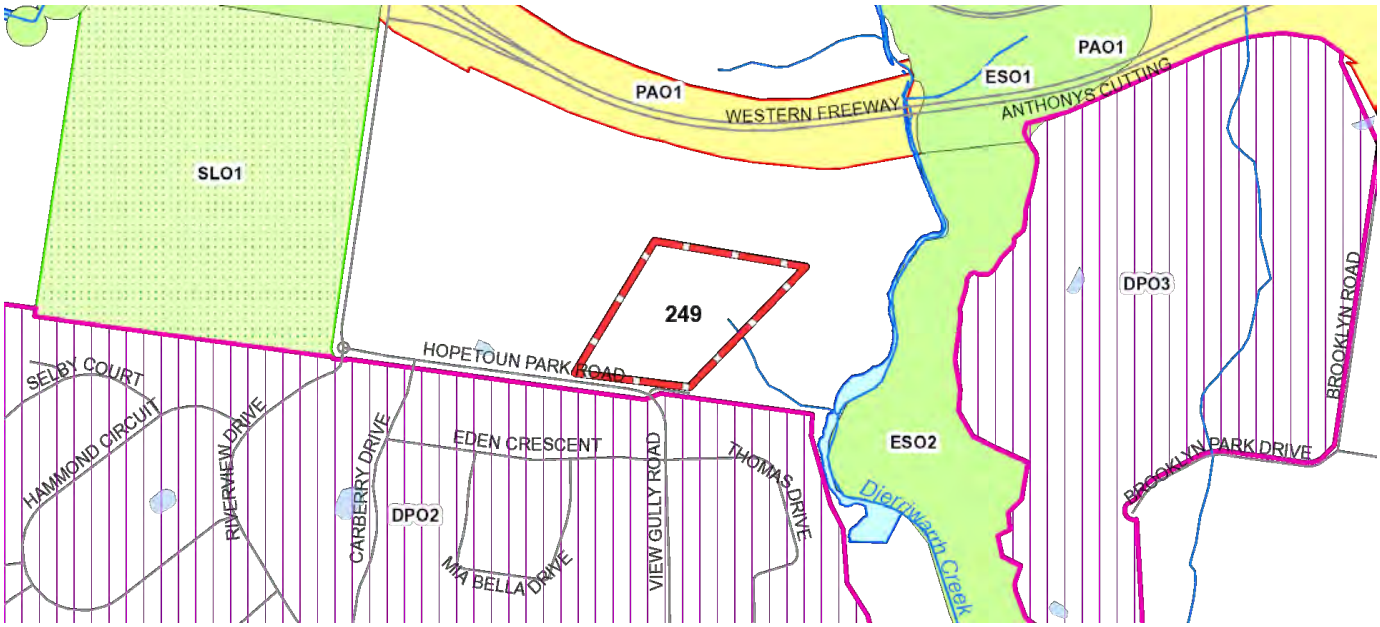

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PLANNING PROPERTY REPORT

Designated Bushfire Prone Areas

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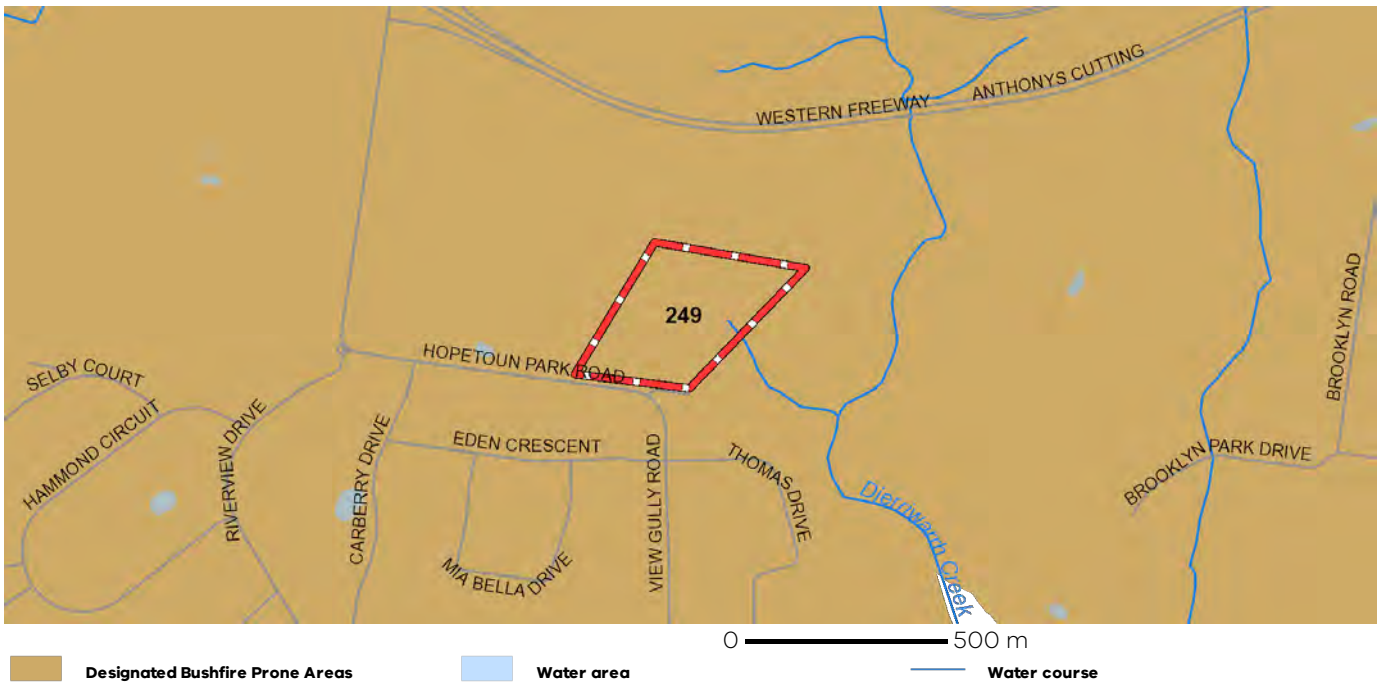

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

From www.planning.vic.gov.au at 16 June 2022 03:35 PM

PROPERTY DETAILS

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Lot and Plan Number:	**Lot 4 LP145516**
Standard Parcel Identifier (SPI):	**4\LP145516**
Local Government Area (Council):	**MOORABOOL** www.moorabool.vic.gov.au
Council Property Number:	**401400**
Planning Scheme:	**Moorabool** Planning Scheme - Moorabool
Directory Reference:	**Melway 335 E12**

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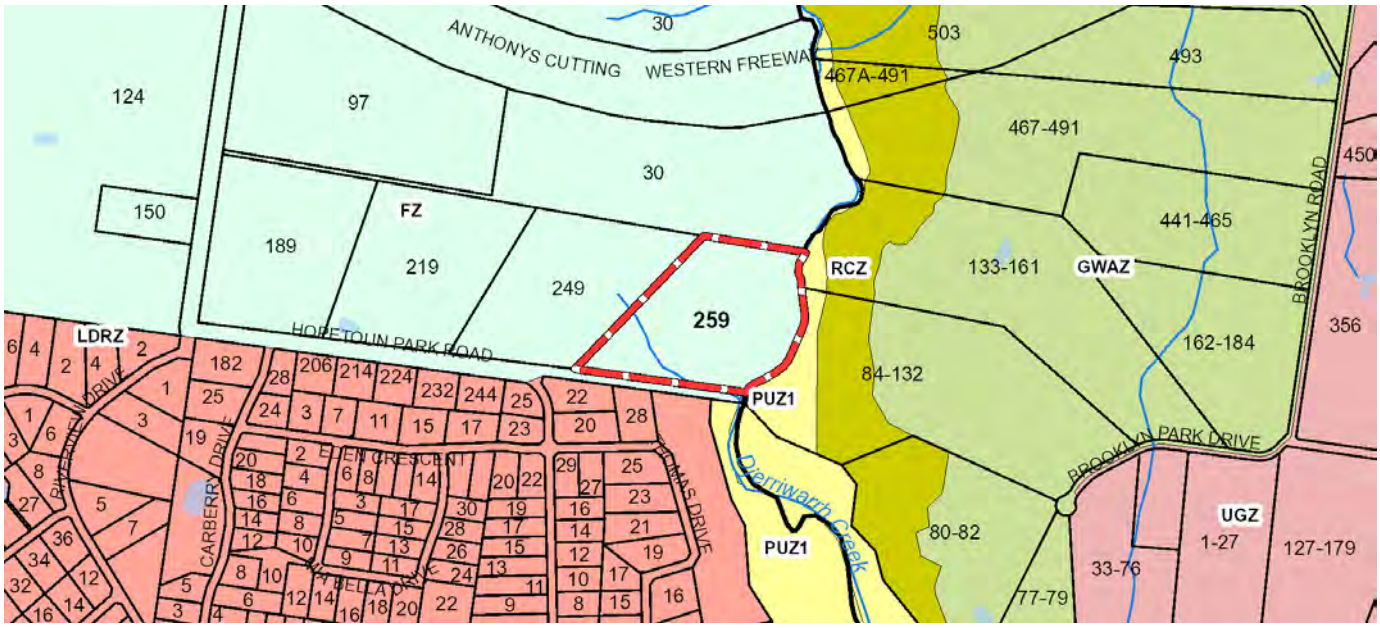

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PUZ1 - Public Use-Service and Utility	RCZ - Rural Conservation	UGZ - Urban Growth
Water area	Water course	

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

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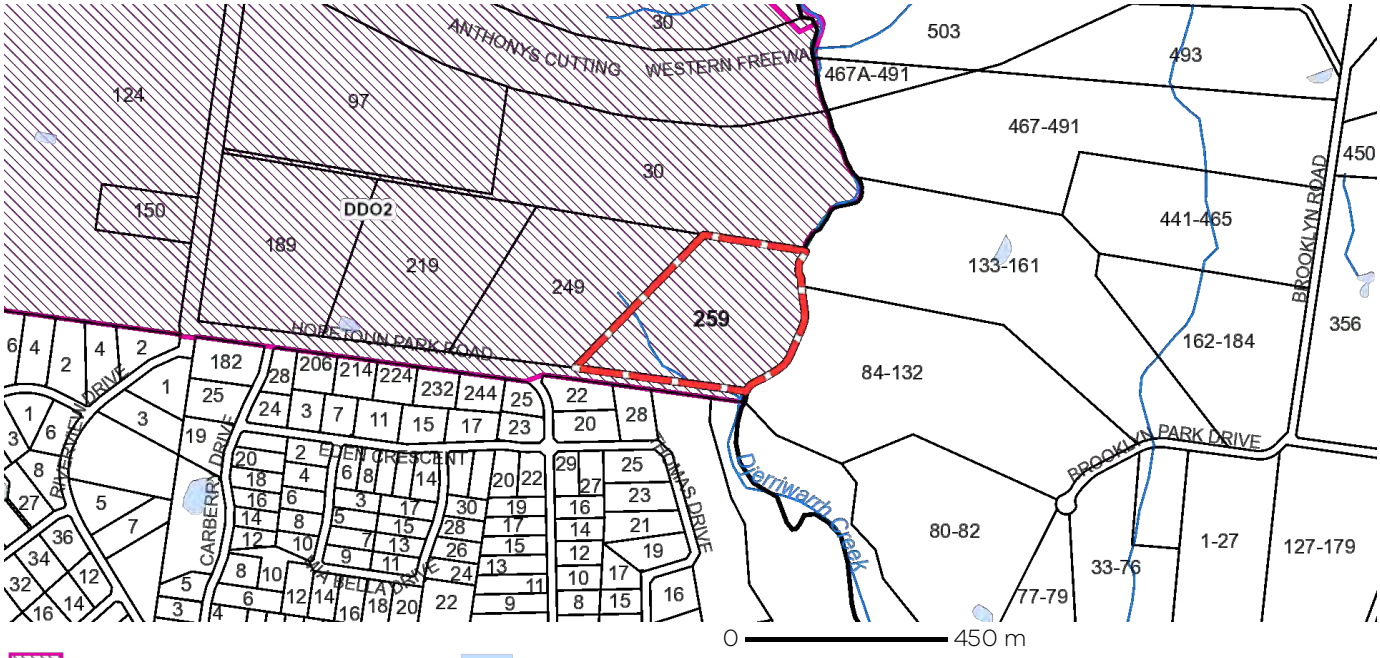

DDO - Design and Development Overlay | Water area | Water course

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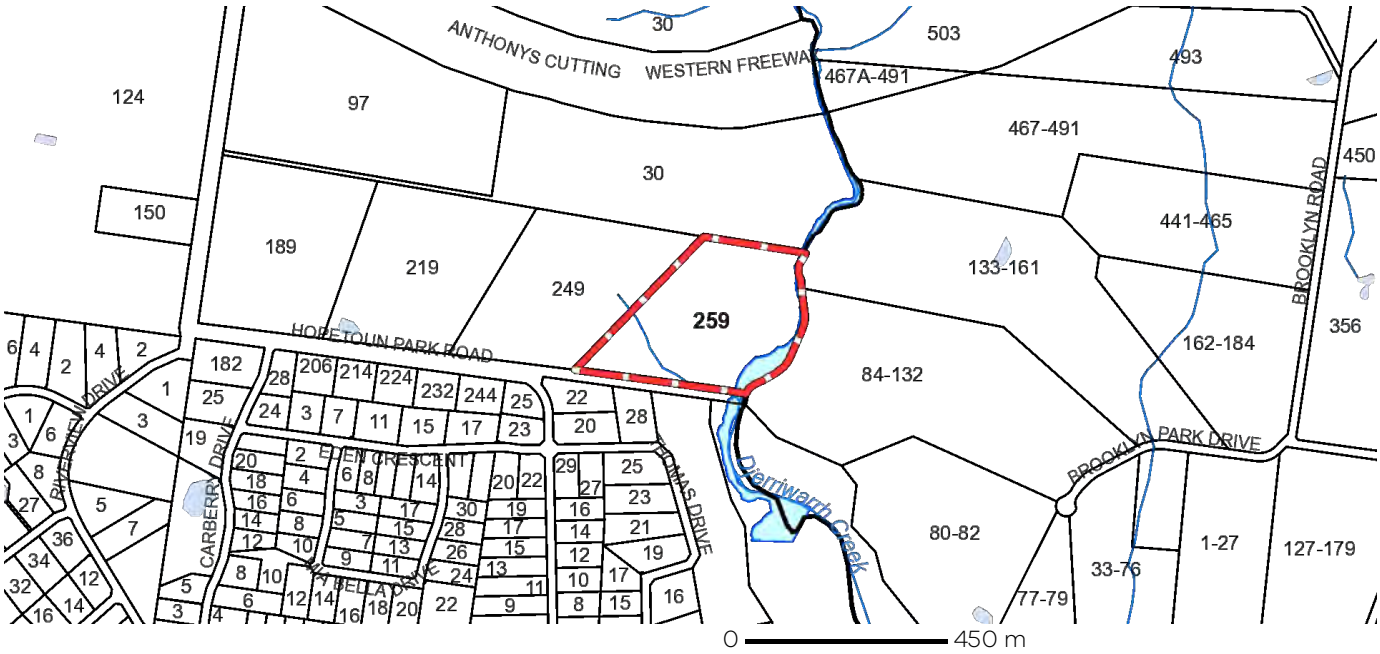
LAND SUBJECT TO INUNDATION OVERLAY (LSIO) (MOORABOOL)



LSIO - Land Subject to Inundation Overlay | Water area | Water course

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Planning Overlays

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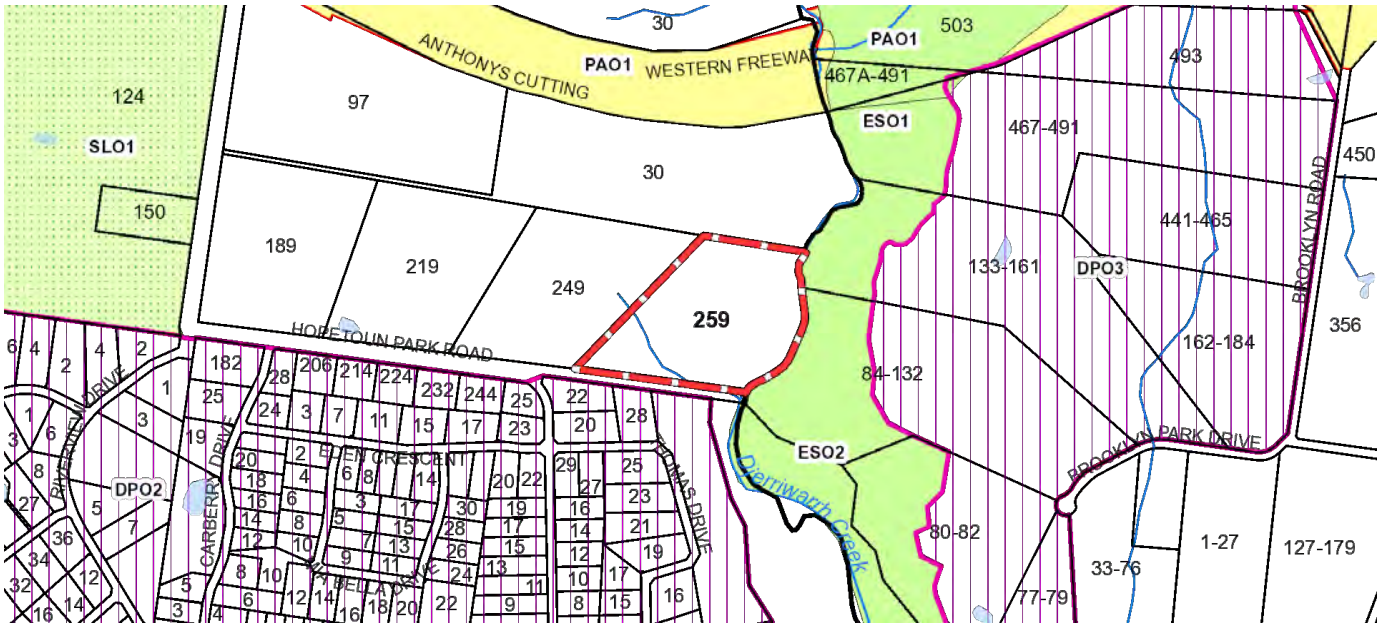

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PLANNING PROPERTY REPORT

Environment, Land, Water and Planning

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

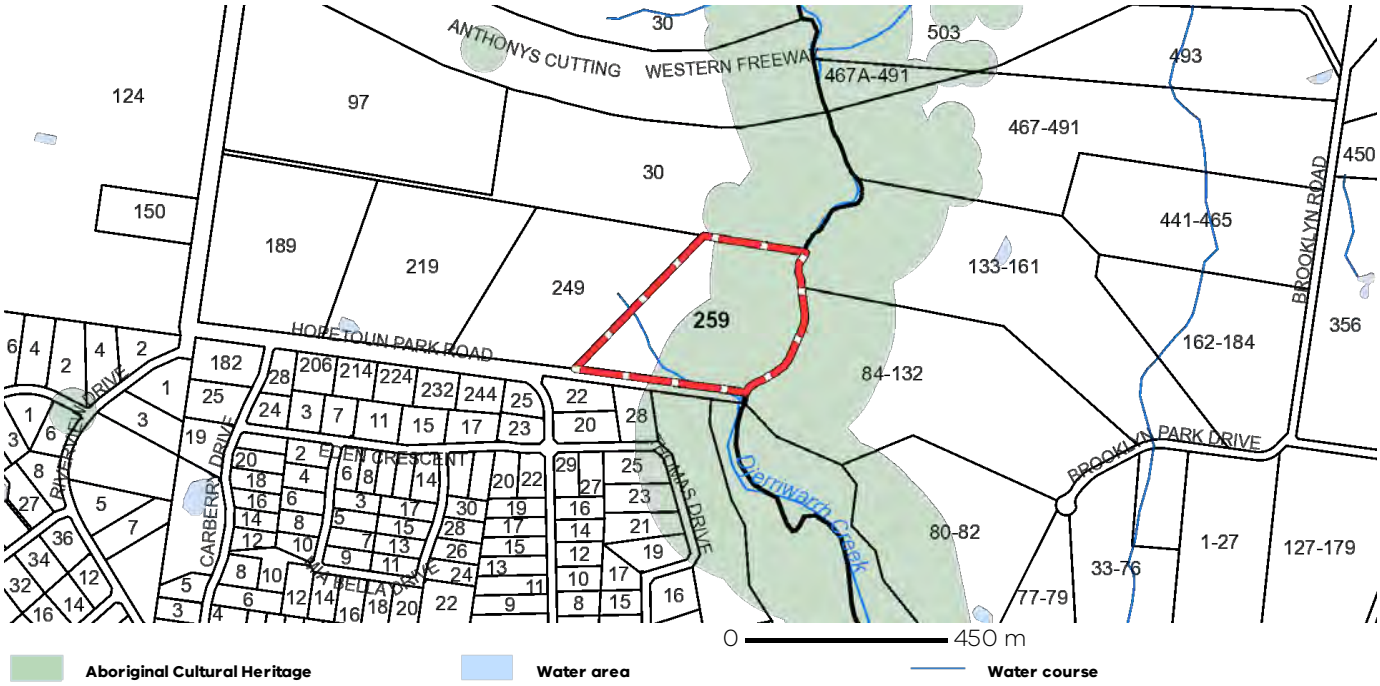
Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to
http://www.aav.nrms.net.au/aavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation



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Environment, Land, Water and Planning

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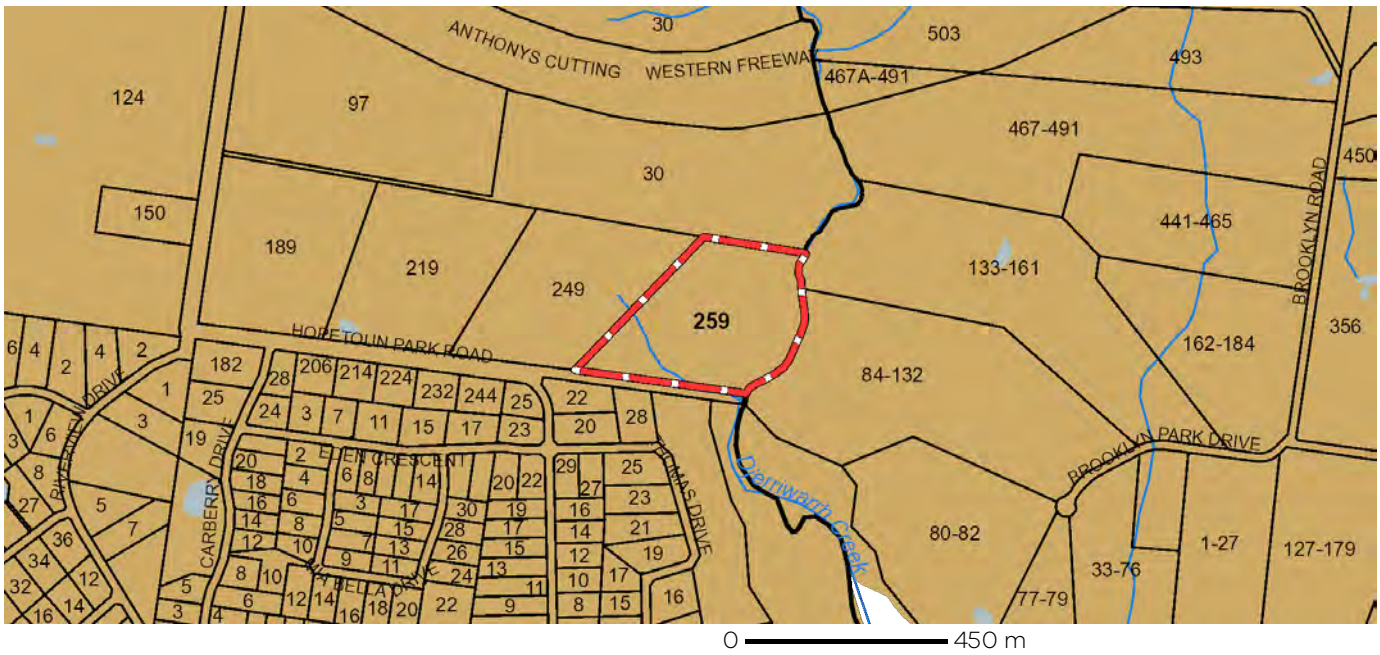

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Appendix D – Title Documents and Plans

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11047 FOLIO 765

Security no : 124092130119U
Produced 30/08/2021 10:42 AM

LAND DESCRIPTION

Lot 2 on Plan of Subdivision 604556J.
PARENT TITLE Volume 03442 Folio 380
Created by instrument PS604556J 08/01/2008

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
BACCHUS MARSH PROPERTY GROUP PTY LTD of 484 ST KILDA ROAD MELBOURNE VIC 8001
AQ111043C 03/08/2017

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987
AF483359P 21/11/2007

DIAGRAM LOCATION

SEE PS604556J FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 124 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Plan**
Document Identification	**PS604556J**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**30/08/2021 10:44**

PLAN OF SUBDIVISION

Stage No. /

LTO use only

EDITION 1

P.S. 604556 J

Location of Land

Parish: Merrimu

Township: —

Section: 7

Crown Allotment: 3

Crown Portion: —

LTO base record:

Title References:

Vol 3442 Fol 380 (PART)

Last Plan Reference: —

Postal Address: 124 Hopetoun Park Road
Hopetoun Park, 3340

MGA 94 Co-ordinates: N 279 330

(Of approx. centre of land in plan) E 5825 520 Zone 55

Council Certification and Endorsement

Council Name: Moorarbool Shire Council Ref: 2006 - 200

1. This plan is certified under section 6 of the Subdivision Act 1988.

~~2. This plan is certified under section 11(7) of the Subdivision Act 1988.~~
~~Date of original certification under section 6 / /~~

~~3. This is a statement of compliance issued under section 21 of the Subdivision Act 1988.~~

Open Space

(i) A requirement for public open space under section 18 Subdivision Act 1988 ~~has~~ has not been made.

~~(ii) The requirement has been satisfied.~~

~~(iii) The requirement is to be satisfied in Stage~~

Council Delegate

~~Council seal~~

Date 08 / 10 / 2007

Vesting of Roads or Reserves

Identifier	Council/Body/Person
Nil	Nil

Notations

Depth Limitation: Does not apply

Staging This is not a staged subdivision
Planning Permit No. 2006 - 200

Survey:- This plan is based on survey.

To be completed where applicable

Parwan PM 30 & PM 43
Merrimu PM 85 & PM 86

This survey has been connected to permanent marks no(s). PM SR 71K3

In proclaimed Survey Area no. ——

Easement Information

Legend: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	Water Supply	2	This Plan	Lot 1 on this plan
A-1	Corriogeway	10.06	Transfer 625128	CT VOL 3442 FOL 380

LTO use only

Statement of Compliance / Exemption Statement

Received ✓

Date 24/12/2007

LTO use only

PLAN REGISTERED

TIME 2:45 PM

DATE 08/01/2008

B. Greenland.

Assistant Registrar of Titles

SHEET 1 OF 2 SHEETS

TG SULLIVAN & ASSOCIATES PTY LTD
ACN 120 363 073
ABN 45 120 363 073
PO BOX 1394 BAKERY HILL 3354
PH 53 689 362

LICENSED SURVEYOR(PRINT) THOMAS GERARD SULLIVAN

SIGNATURE _____ DATE 16/07/07

REF 1032 VERSION 02

DATE 08/10/07

COUNCIL DELEGATE SIGNATURE

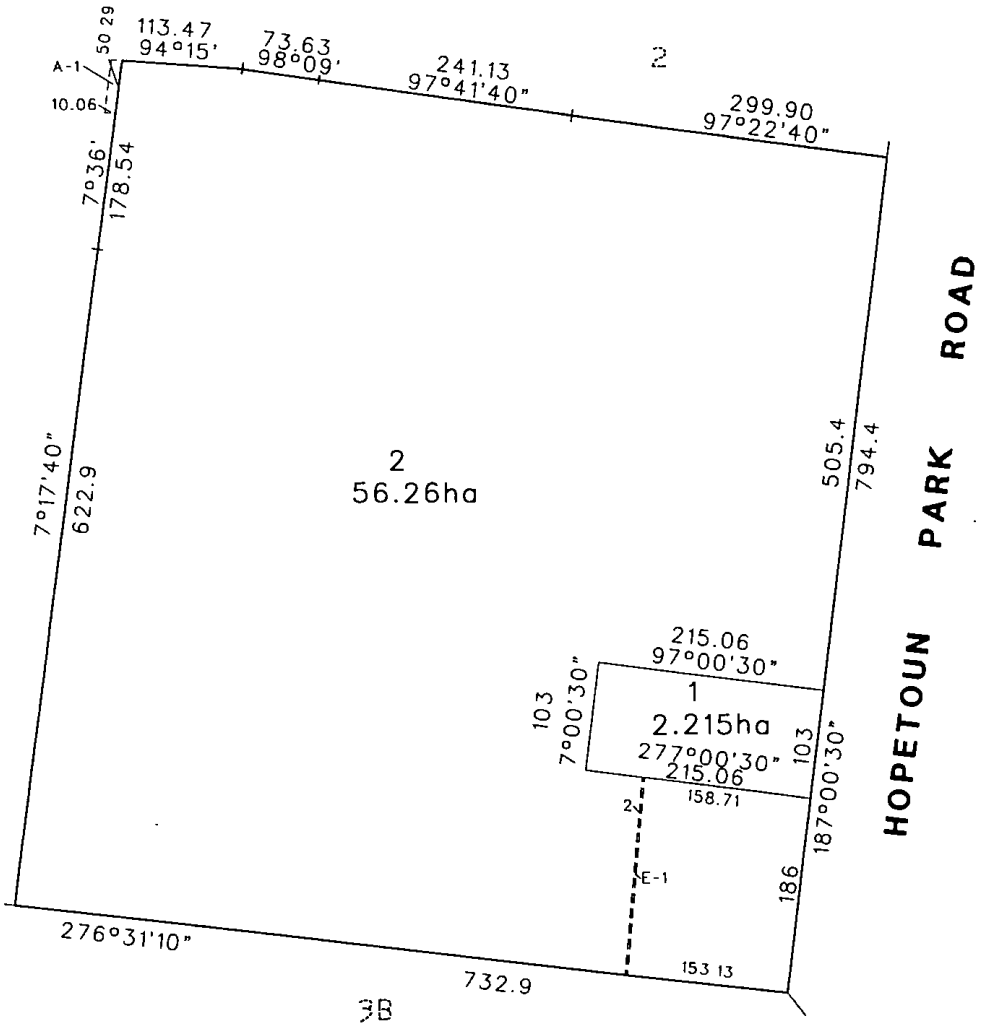
Original sheet size A3

PLAN OF SUBDIVISION

Stage No. /

Plan Number P.S. 604556 J

MGA 94 ZONE 55



SHEET 2 OF 2 SHEETS

ORIGINAL SHEET SIZE A3 | SCALE 1:5000

SCALE 50 0 50 100 150 200

LENGTHS ARE IN METRES

LICENSED SURVEYOR (PRINT) THOMAS GERARD SULLIVAN

SIGNATURE _____ DATE 16/07/07

REF 1032 VERSION 02

DATE 08/10/07
COUNCIL DELEGATE SIGNATURE

0 10 20 30 40 50 60 70 80 90 100 110mm

LISTECH

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Instrument**
Document Identification	**AF483359P**
Number of Pages (excluding this cover sheet)	**7**
Document Assembled	**30/08/2021 10:44**

APPLICATION BY RESPONSIBLE AUTHORITY, RELEVANT AUTHORITY, REFERRAL AUTHORITY OR COUNCIL FOR THE MAKING OF A RECORDING OF AN AGREEMENT.

AF483359P

21/11/2007 $102 173

Section 181 (1) Planning and Environment Act 1987

OFFICE OF TITLES C.M.O. VICTORIA

Lodged by:

Name: JILLIAN THOMAS

Phone: (03) 5367 2311

Address: 10 AMSTEL CLOSE
BACCHUS MARSH 3340

Ref:: 7157

Customer No.: 1618W

The authority or council having made an agreement referred to in section 181 (21) of the Planning and Environment Act 1987 requires a recording to be made in the Register for the land:

Land: Certificate of Title Volume 3442 Folio 380

Lots 1, 2 and 3 TP604721 H
124 Hopetoun Park Road, Hopetoun Park

Authority: Moorabool Shire Council
15 Stead Street, Ballan 3342

Section and Act under which agreement made: Section 173 Planning and Environment Act 1987.

A copy of this agreement is attached to this application.

Date: 12 November 2007

Signed: Leanne Wilson

Name of Officer: Leanne Wilson

DATED 2007

MOORABOOL SHIRE COUNCIL

and

FRASER PROPERTY INVESTMENTS PTY LTD
ACN 081 049 229

SECTION 173 AGREEMENT

JILLIAN THOMAS
Lawyer
10 Amstel Close
BACCHUS MARSH 3340

Tel: 5367 2311
DX: 33104 Bacchus Marsh
Fax: 5367 4717
Ref: JT:7157

PLANNING AND ENVIRONMENT ACT 1987

SECTION 173 AGREEMENT

THIS AGREEMENT is made the 12th day of November 2007

BETWEEN:

MOORABOOL SHIRE COUNCIL of 197 Main Street Bacchus Marsh 3340 ("**Council**")

- and -

FRASER PROPERTY INVESTMENTS PTY LTD ACN 081 049 229 of 175 Main Street, Bacchus Marsh 3340 ("**the Owner**")

INTRODUCTION

A. Council is a responsible authority pursuant to the Act for the Planning Scheme.

B. The Owner is the registered proprietor of the subject land.

C. On 29 September 2006 Council issued Planning Permit No. 2006-200 (**"the Planning Permit"**) allowing the subject land to be divided into two lots.

D. The parties enter into this agreement to achieve and advance the objectives of planning in Victoria and the objectives of the Planning Scheme in respect of the subject land.

IT IS AGREED

1. DEFINITIONS

In this agreement the words and expressions set out in this clause have the following meanings unless the context admits otherwise:

"the Act" means the *Planning and Environment Act 1987.*

"this agreement" means this agreement and any agreement executed by the parties expressed to be supplemental to this agreement.

"the mortgagee" means the person or persons registered or entitled to be registered by the Registrar of Titles as a mortgagee of the subject land.

"Owner" means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the subject land or any part of it and includes a mortgagee-in-possession.

"Planning Permit" means the Planning Permit referred to in Recital C of this agreement.

"**Planning Scheme**" means the Moorabool Planning Scheme and any other planning scheme which applies to the subject land.

"subject land" means the land situated at Lots 1, 2 and 3 on Title Plan 604721H, 124 Hopetoun Park Road, Hopetoun Park 3340 and being the land referred to in Certificate of Title Volume 3442 Folio 380.

2. INTERPRETATION

In this agreement unless the context admits otherwise:

(a) The singular includes the plural and vice versa.

(b) A reference to a gender includes a reference to each other gender.

(c) A reference to a person includes a reference to a firm, corporation or other corporate body and that person's successors in law.

(d) If a party consists of more than one person this agreement binds them jointly and each of them severally.

(e) A word or expression used in this agreement has its ordinary meaning unless that word or expression is defined in this agreement. If a word or expression is not defined in this agreement and it is defined in the Act it has the meaning as defined in the Act.

(f) The introductory clauses in this agreement are and will be deemed to form part of this agreement.

(g) The obligations of the Owner under this agreement will take effect as separate and several covenants which are annexed to and run at law and equity with the subject land provided that if the subject land is subdivided, this agreement must be read and applied so that each subsequent owner of a lot is only responsible for those covenants and obligations which relate to that owner's lot.

3. SPECIFIC OBLIGATIONS OF THE OWNER

The Owner covenants and agrees that

(a) any lot in the subdivision will not be further subdivided pursuant to the provisions of the Planning Scheme which is current at the date of this agreement;

(b) it is agreed that this obligation shall cease to have force and effect should the land be re-zoned at any time for residential purposes.

4. OWNER'S WARRANTIES

Without limiting the operation or effect which this agreement has, the Owner warrants that apart from the Owner and any other person who has consented in writing to this agreement, no other person has any interest, either legal or equitable, in the subject land which may be affected by this agreement.

5. SUCCESSORS IN TITLE

Without limiting the operation or effect which this agreement has, the Owner must ensure that, until such time as a memorandum of this agreement is registered on the title to the subject land, successors in title shall be required to:

(a) give effect to and do all acts and sign all documents which will require those successors to give effect to this agreement; and

(b) execute a deed agreeing to be bound by the terms of this agreement.

6. GENERAL MATTERS

6.1 Notices

A notice or other communication required or permitted to be served by a party on another party must be in writing and may be served;

(a) by delivering it personally to that party;

(b) by sending it by prepaid post addressed to that party at the address set out in this agreement or subsequently notified to each party from time to time; or

(c) by sending it by facsimile provided that a communication sent by facsimile shall be confirmed immediately in writing by the sending party by hand delivery or prepaid post.

6.2 A notice or other communication is deemed served:

(a) if delivered, on the next following business day;

(b) if posted, on the expiration of two days after the date of posting; or

(c) if sent by facsimile, on the next following business day unless the receiving party has requested retransmission before the end of that business day.

6.3 No Waiver

Any time or other indulgence granted by Council to the Owner or any variation of the terms and conditions of this agreement or any judgment or order obtained by Council against the Owner will not in any way amount to a waiver of any of the rights or remedies of Council in relation to the terms of this agreement.

6.4 Severability

If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this agreement is unenforceable, illegal or void then it must be severed and the other provisions of this agreement will remain operative.

7. COMMENCEMENT OF AGREEMENT

Unless otherwise provided in this agreement, this agreement commences from the date of this agreement.

EXECUTED by the parties on the date set out at the commencement of this agreement.

SIGNED for and on behalf of the Moorabool Shire Council under Delegated Authority pursuant to Section 188(1)(b) Section (2)(b) and Section 171 (2)(a) of the Planning and Environment Act 1987 by:)

.....
Chief Executive Officer

THE COMMON SEAL of **FRASER PROPERTY INVESTMENTS PTY LTD ACN 081 049 229** was affixed in the presence of authorised persons:)

FRASER PROPERTY INVESTMENTS PTY LTD
A.C.N. 081 049 229
COMMON SEAL

.....
Director
Full Name: Graeme John Rayner
Address: 175 Main Street Bacchus Marsh 3340

.....
Company Secretary
Full Name: Marcus Hamilton Rayner
Address: 175 Main Street Bacchus Marsh 3340

Commonwealth Bank of Australia as Mortgagee of registered mortgage numbered AC261594T HEREBY CONSENTS to the Owner entering into this agreement and in the event that the Mortgagee becomes mortgagee in possession agrees to be bound by the covenants and conditions of the agreement.

SIGNED SEALED and DELIVERED
in Parramatta, New South Wales for and on behalf
of COMMONWEALTH BANK OF AUSTRALIA
ABN 48 123 123 124 by its Attorney
Elizabeth Constable
under Power dated 11 December 2000, a certified
copy of which is filed in Permanent Order Book
No. 277 at Page 016 who certifies that he/she is
Manager Post Settlements
OF COMMONWEALTH
BANK OF AUSTRALIA in the presence of:

KYLIE HOOMANS

Elizabeth Constable

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11047 FOLIO 766

Security no : 124092130124P
Produced 30/08/2021 10:42 AM

LAND DESCRIPTION

Lot 2 on Title Plan 604721H.
PARENT TITLE Volume 03442 Folio 380
Created by instrument PS604556J 08/01/2008

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
BACCHUS MARSH PROPERTY GROUP PTY LTD of 484 ST KILDA ROAD MELBOURNE VIC 8001
AQ111043C 03/08/2017

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987
AF483359P 21/11/2007

DIAGRAM LOCATION

SEE TP604721H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 124 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11047 FOLIO 767

Security no : 124092130123Q
Produced 30/08/2021 10:42 AM

LAND DESCRIPTION

Lot 3 on Title Plan 604721H.
PARENT TITLE Volume 03442 Folio 380
Created by instrument PS604556J 08/01/2008

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
BACCHUS MARSH PROPERTY GROUP PTY LTD of 484 ST KILDA ROAD MELBOURNE VIC 8001
AQ111043C 03/08/2017

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987
AF483359P 21/11/2007

DIAGRAM LOCATION

SEE TP604721H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 124 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**TP604721H**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**30/08/2021 10:44**

TITLE PLAN		EDITION 2	TP 604721H

Location of Land

Parish: MERRIMU
Township:
Section: 7
Crown Allotment: 3, 3A(PT), 3B(PT)
Crown Portion:

Last Plan Reference:
Derived From: VOL 3442 FOL 380
Depth Limitation: NIL

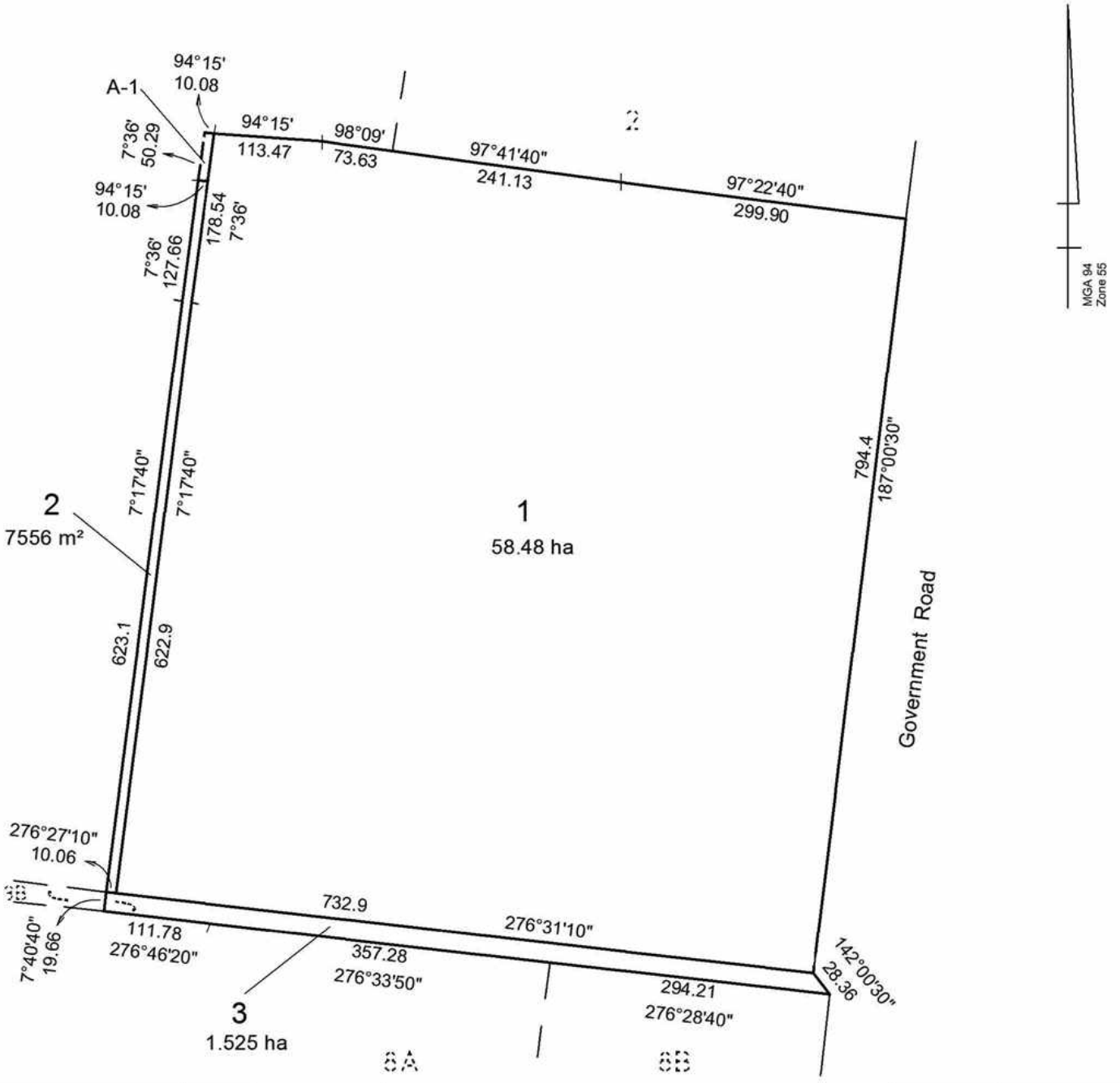
Notations

Easement Information

Legend: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (metres)	Origin	Land Benefited / In Favour Of
A-1	Carriageway	10.06	Transfer 625128	Volume 3442 Folio 380

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 16/08/2000
VERIFIED: CP



LENGTHS ARE IN METRES	Scale 1 : 4500		Sheet 1 of 1 sheets

MODIFICATION TABLE

RECORD OF ALL ADDITIONS OR CHANGES TO THE PLAN

PLAN NUMBER

TP604721H

WARNING: THE IMAGE OF THIS DOCUMENT OF THE REGISTER HAS BEEN DIGITALLY AMENDED. NO FURTHER AMENDMENTS ARE TO BE MADE TO THE ORIGINAL DOCUMENT OF THE REGISTER.

AFFECTED LAND/PARCEL	LAND/PARCEL IDENTIFIER CREATED	MODIFICATION	DEALING NUMBER	DATE	EDITION NUMBER	ASSISTANT REGISTRAR OF TITLES
LOT 1		SUBDIVISION	PS604556J	8/1/08	2	B.P.G.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11047 FOLIO 764

Security no : 124092131606D
Produced 30/08/2021 11:14 AM

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 604556J.
PARENT TITLE Volume 03442 Folio 380
Created by instrument PS604556J 08/01/2008

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
CAIN PETER SIDON
SHAYE RENEE SIDON both of 6 RUXTON WAY HOPETOUN PARK VIC 3340
AQ141810P 14/08/2017

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AQ141811M 14/08/2017
POLICE FINANCIAL SERVICES LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987
AF483359P 21/11/2007

DIAGRAM LOCATION

SEE PS604556J FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 150 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**PS604556J**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**30/08/2021 11:19**

PLAN OF SUBDIVISION

Stage No. /

LTO use only

EDITION 1

P.S. 604556 J

Location of Land

Parish: Merrimu

Township: —

Section: 7

Crown Allotment: 3

Crown Portion: —

LTO base record:

Title References:

Vol 3442 Fol 380 (PART)

Last Plan Reference: —

Postal Address: 124 Hopetoun Park Road
Hopetoun Park, 3340

MGA 94 Co-ordinates: N 279 330

(Of approx. centre of land in plan) E 5825 520 Zone 55

Council Certification and Endorsement

Council Nome: Moorarbool Shire Council

Ref: 2006 - 200

1. This plan is certified under section 6 of the Subdivision Act 1988.

~~2. This plan is certified under section 11(7) of the Subdivision Act 1988.~~
~~Date of original certification under section 6 / /~~

~~3. This is a statement of compliance issued under section 21 of the Subdivision Act 1988.~~

Open Spoce

(i) A requirement for public open space under section 18 Subdivision Act 1988 ~~has~~ has not been made.

~~(ii) The requirement has been satisfied.~~

~~(iii) The requirement is to be satisfied in Stage~~

Council Delegate

~~Council seal~~

Date 08 / 10 / 2007

Vesting of Roods or Reserves

Identifier	Council/Body/Person
Nil	Nil

Notations

Depth Limitation: Does not apply

Staging This is not a staged subdivision
Planning Permit No. 2006 - 200

Survey:- This plan is based on survey.

To be completed where applicable

Parwan PM 30 & PM 43
Merrimu PM 85 & PM 86

This survey has been connected to permanent marks no(s). PM SR 71K3

In proclaimed Survey Area no. ——

Easement Information

Legend: A - Appurtenant Easement E - Encumbering Easement R - Encumbering Easement (Road)

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	Water Supply	2	This Plan	Lot 1 on this plan
A-1	Corriogeway	10.06	Transfer 625128	CT VOL 3442 FOL 380

LTO use only

Statement of Compliance / Exemption Statement

Received ✓

Date 24/12/2007

LTO use only

PLAN REGISTERED

TIME 2:45 PM

DATE 08/01/2008

B. Greenland.

Assistant Registrar of Titles

SHEET 1 OF 2 SHEETS

TG SULLIVAN & ASSOCIATES PTY LTD
ACN 120 363 073
ABN 45 120 363 073
PO BOX 1394 BAKERY HILL 3354
PH 53 689 362

LICENSED SURVEYOR(PRINT) THOMAS GERARD SULLIVAN

SIGNATURE _____ DATE 16/07/07

REF 1032 VERSION 02

DATE 08/10/07

COUNCIL DELEGATE SIGNATURE

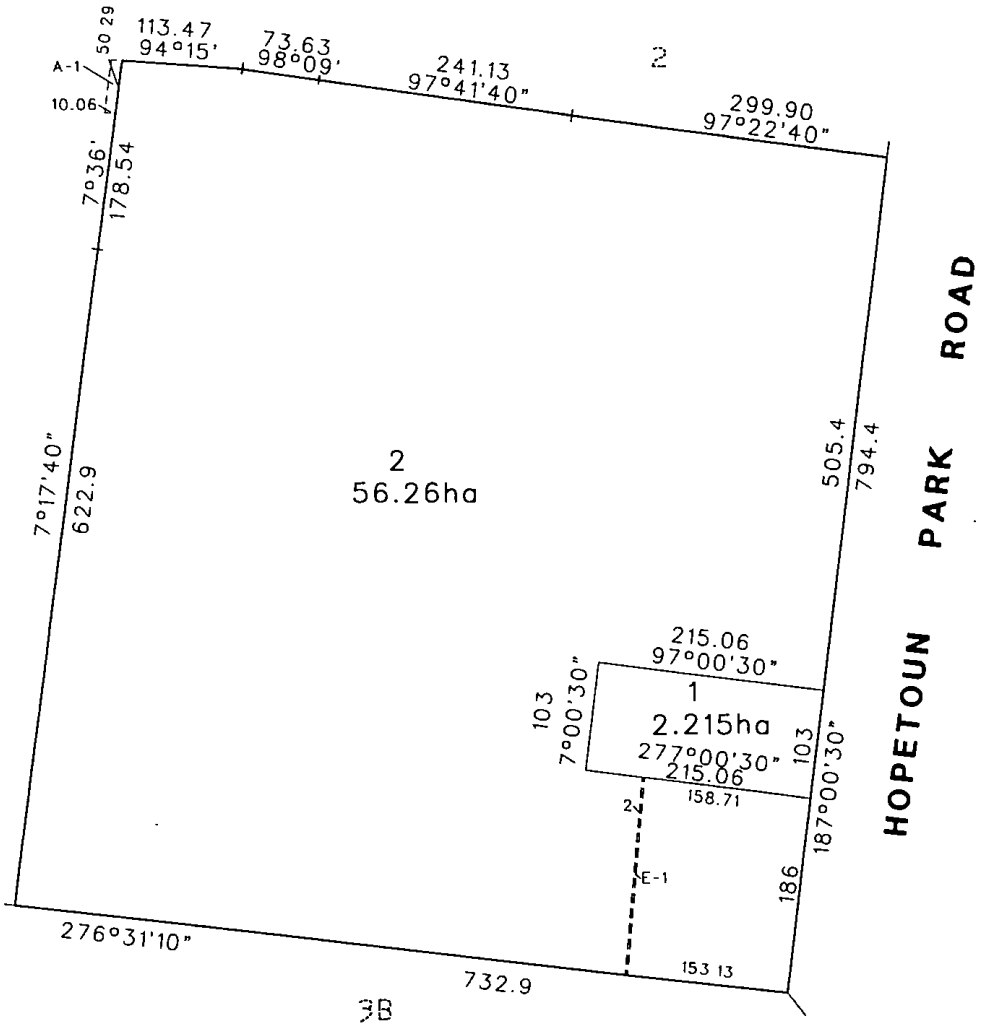
Original sheet size A3

PLAN OF SUBDIVISION

Stage No. /

Plan Number P.S. 604556 J

MGA 94 ZONE 55



SHEET 2 OF 2 SHEETS

ORIGINAL SHEET SIZE A3 | SCALE 1:5000

SCALE 50 0 50 100 150 200

LENGTHS ARE IN METRES

LICENSED SURVEYOR (PRINT) THOMAS GERARD SULLIVAN

SIGNATURE _____ DATE 16/07/07

REF 1032 VERSION 02

DATE 08/10/07
COUNCIL DELEGATE SIGNATURE

0 10 20 30 40 50 60 70 80 90 100 110mm

LISTECH

Imaged Document Cover Sheet

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Number of Pages (excluding this cover sheet)	**7**
Document Assembled	**30/08/2021 11:19**

APPLICATION BY RESPONSIBLE AUTHORITY, RELEVANT AUTHORITY, REFERRAL AUTHORITY OR COUNCIL FOR THE MAKING OF A RECORDING OF AN AGREEMENT.

AF483359P

21/11/2007 $102 173

Section 181 (1) Planning and Environment Act 1987

OFFICE OF TITLES C.M.O. VICTORIA

Lodged by:

Name: JILLIAN THOMAS

Phone: (03) 5367 2311

Address: 10 AMSTEL CLOSE
BACCHUS MARSH 3340

Ref:: 7157

Customer No.: 1618W

The authority or council having made an agreement referred to in section 181 (21) of the Planning and Environment Act 1987 requires a recording to be made in the Register for the land:

Land: Certificate of Title Volume 3442 Folio 380

Lots 1, 2 and 3 TP604721 H
124 Hopetoun Park Road, Hopetoun Park

Authority: Moorabool Shire Council
15 Stead Street, Ballan 3342

Section and Act under which agreement made: Section 173 Planning and Environment Act 1987.

A copy of this agreement is attached to this application.

Date: 12 November 2007

Signed: Leanne Wilson

Name of Officer: Leanne Wilson

DATED 2007

MOORABOOL SHIRE COUNCIL

and

FRASER PROPERTY INVESTMENTS PTY LTD
ACN 081 049 229

SECTION 173 AGREEMENT

JILLIAN THOMAS
Lawyer
10 Amstel Close
BACCHUS MARSH 3340

Tel: 5367 2311
DX: 33104 Bacchus Marsh
Fax: 5367 4717
Ref: JT:7157

PLANNING AND ENVIRONMENT ACT 1987

SECTION 173 AGREEMENT

THIS AGREEMENT is made the 12th day of November 2007

BETWEEN:

MOORABOOL SHIRE COUNCIL of 197 Main Street Bacchus Marsh 3340 ("**Council**")

- and -

FRASER PROPERTY INVESTMENTS PTY LTD ACN 081 049 229 of 175 Main Street, Bacchus Marsh 3340 ("**the Owner**")

INTRODUCTION

A. Council is a responsible authority pursuant to the Act for the Planning Scheme.

B. The Owner is the registered proprietor of the subject land.

C. On 29 September 2006 Council issued Planning Permit No. 2006-200 (**"the Planning Permit"**) allowing the subject land to be divided into two lots.

D. The parties enter into this agreement to achieve and advance the objectives of planning in Victoria and the objectives of the Planning Scheme in respect of the subject land.

IT IS AGREED

1. DEFINITIONS

In this agreement the words and expressions set out in this clause have the following meanings unless the context admits otherwise:

"the Act" means the *Planning and Environment Act 1987.*

"this agreement" means this agreement and any agreement executed by the parties expressed to be supplemental to this agreement.

"the mortgagee" means the person or persons registered or entitled to be registered by the Registrar of Titles as a mortgagee of the subject land.

"Owner" means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the subject land or any part of it and includes a mortgagee-in-possession.

"Planning Permit" means the Planning Permit referred to in Recital C of this agreement.

"**Planning Scheme**" means the Moorabool Planning Scheme and any other planning scheme which applies to the subject land.

"subject land" means the land situated at Lots 1, 2 and 3 on Title Plan 604721H, 124 Hopetoun Park Road, Hopetoun Park 3340 and being the land referred to in Certificate of Title Volume 3442 Folio 380.

2. INTERPRETATION

In this agreement unless the context admits otherwise:

(a) The singular includes the plural and vice versa.

(b) A reference to a gender includes a reference to each other gender.

(c) A reference to a person includes a reference to a firm, corporation or other corporate body and that person's successors in law.

(d) If a party consists of more than one person this agreement binds them jointly and each of them severally.

(e) A word or expression used in this agreement has its ordinary meaning unless that word or expression is defined in this agreement. If a word or expression is not defined in this agreement and it is defined in the Act it has the meaning as defined in the Act.

(f) The introductory clauses in this agreement are and will be deemed to form part of this agreement.

(g) The obligations of the Owner under this agreement will take effect as separate and several covenants which are annexed to and run at law and equity with the subject land provided that if the subject land is subdivided, this agreement must be read and applied so that each subsequent owner of a lot is only responsible for those covenants and obligations which relate to that owner's lot.

3. SPECIFIC OBLIGATIONS OF THE OWNER

The Owner covenants and agrees that

(a) any lot in the subdivision will not be further subdivided pursuant to the provisions of the Planning Scheme which is current at the date of this agreement;

(b) it is agreed that this obligation shall cease to have force and effect should the land be re-zoned at any time for residential purposes.

4. OWNER'S WARRANTIES

Without limiting the operation or effect which this agreement has, the Owner warrants that apart from the Owner and any other person who has consented in writing to this agreement, no other person has any interest, either legal or equitable, in the subject land which may be affected by this agreement.

5. SUCCESSORS IN TITLE

Without limiting the operation or effect which this agreement has, the Owner must ensure that, until such time as a memorandum of this agreement is registered on the title to the subject land, successors in title shall be required to:

(a) give effect to and do all acts and sign all documents which will require those successors to give effect to this agreement; and

(b) execute a deed agreeing to be bound by the terms of this agreement.

6. GENERAL MATTERS

6.1 Notices

A notice or other communication required or permitted to be served by a party on another party must be in writing and may be served;

(a) by delivering it personally to that party;

(b) by sending it by prepaid post addressed to that party at the address set out in this agreement or subsequently notified to each party from time to time; or

(c) by sending it by facsimile provided that a communication sent by facsimile shall be confirmed immediately in writing by the sending party by hand delivery or prepaid post.

6.2 A notice or other communication is deemed served:

(a) if delivered, on the next following business day;

(b) if posted, on the expiration of two days after the date of posting; or

(c) if sent by facsimile, on the next following business day unless the receiving party has requested retransmission before the end of that business day.

6.3 No Waiver

Any time or other indulgence granted by Council to the Owner or any variation of the terms and conditions of this agreement or any judgment or order obtained by Council against the Owner will not in any way amount to a waiver of any of the rights or remedies of Council in relation to the terms of this agreement.

6.4 Severability

If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this agreement is unenforceable, illegal or void then it must be severed and the other provisions of this agreement will remain operative.

7. COMMENCEMENT OF AGREEMENT

Unless otherwise provided in this agreement, this agreement commences from the date of this agreement.

EXECUTED by the parties on the date set out at the commencement of this agreement.

SIGNED for and on behalf of the Moorabool Shire Council under Delegated Authority pursuant to Section 188(1)(b) Section (2)(b) and Section 171 (2)(a) of the Planning and Environment Act 1987 by:)

.....
Chief Executive Officer

THE COMMON SEAL of **FRASER PROPERTY INVESTMENTS PTY LTD ACN 081 049 229** was affixed in the presence of authorised persons:)

FRASER PROPERTY INVESTMENTS PTY LTD
A.C.N. 081 049 229
COMMON SEAL

.....
Director
Full Name: Graeme John Rayner
Address: 175 Main Street Bacchus Marsh 3340

.....
Company Secretary
Full Name: Marcus Hamilton Rayner
Address: 175 Main Street Bacchus Marsh 3340

Commonwealth Bank of Australia as Mortgagee of registered mortgage numbered AC261594T HEREBY CONSENTS to the Owner entering into this agreement and in the event that the Mortgagee becomes mortgagee in possession agrees to be bound by the covenants and conditions of the agreement.

SIGNED SEALED and DELIVERED
in Parramatta, New South Wales for and on behalf
of COMMONWEALTH BANK OF AUSTRALIA
ABN 48 123 123 124 by its Attorney
Elizabeth Constable
under Power dated 11 December 2000, a certified
copy of which is filed in Permanent Order Book
No. 277 at Page 016 who certifies that he/she is
Manager Post Settlements
OF COMMONWEALTH
BANK OF AUSTRALIA in the presence of:

KYLIE HOOMANS

Elizabeth Constable

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 10580 FOLIO 163 Security no : 124092145091V
Produced 30/08/2021 03:23 PM

LAND DESCRIPTION

Lot 3 on Plan of Subdivision 630818G.
PARENT TITLES :
Volume 00452 Folio 353 Volume 08916 Folio 320 Volume 09358 Folio 881
Volume 10067 Folio 551
Created by instrument PS423865C 01/05/2001

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
TERRENCE ANTHONY SHEA
MARY ANN SHEA both of HOPETOUN PARK RD BACCHUS MARSH 3340
X491718L 23/05/2001

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE PS630818G FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 97 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Plan**
Document Identification	**PS630818G**
Number of Pages (excluding this cover sheet)	**3**
Document Assembled	**30/08/2021 15:24**

PLAN OF SUBDIVISION

Under Section 35 of the Subdivision Act 1988

STAGE NO. /

LRS use only

EDITION 1

PS630818G

01/02/2010 $997.10 PS35

Location of Land

Parish: MERRIMU

Township:

Section: 7

Crown Allotment: 1(PART), 4A & 4B

Crown Portion:

Title Reference: VOL.10580 FOL.161, VOL.10580 FOL.162
VOL.10580 FOL.163

Last Plan Reference: LOTS 1, 2 & 3 PS423865C

Postal Address: (at time of subdivision) HOPETOUN PARK ROAD,
HOPETOUN PARK 3340
30 KYLE LANE, HOPETOUN PARK 3340
97 EXFORD WEIR ROAD,
HOPETOUN PARK 3340

MGA94 Co-ordinates (of approx. centre of plan) E 280 400
N 5 825 900
ZONE: 55

Council Certification and Endorsement

Council Name: MOORABOOL SHIRE COUNCIL **Ref:** 2009-258

A. This is a plan under section 35 of the Subdivision Act 1988 which does not create any additional lots.

B. This plan is exempt from Part 3 of the Subdivision Act 1988.

~~C. This is a plan under section 35 of the Subdivision Act 1988 which creates (an) additional lot(s).~~

D. It is certified under section 6 of the Subdivision Act 1988.

~~E. It is certified under section 11(7) of the Subdivision Act 1988.~~

~~F. Date of original certification under section 6. / /~~

G. This is a statement of compliance under section 21 of the Subdivision Act 1988.

Council Delegate
~~Council Seal~~

Date 18 / 11 / 09

~~Re-certified under section 11(7) of the Subdivision Act 1988.~~

~~Council Delegate~~
~~Council Seal~~

~~Date / /~~

Vesting of Roads and / or Reserves

Roads and reserves vest in the council/body/person named when the appropriate vesting date is recorded or transfer registered. Only roads and reserves marked thus (%) vest upon registration of this plan.

Identifier	Council/Body/Person
RESERVE No.1	ROADS CORPORATION
RESERVE No.2	ROADS CORPORATION
RESERVE No.3	ROADS CORPORATION
RESERVE No.4	ROADS CORPORATION

Notations

Staging This ~~is~~/is not a staged subdivision.
Planning Permit No: NOT APPLICABLE

Depth Limitation DOES NOT APPLY

Underlined dimensions shown thus 123.45 are not the result of this survey.
Area of Lot 1 & 2(PT) is deduced from title.

All the land is to be acquired free from all encumbrances other than any easements specified on this plan.

Land to be acquired by compulsory process : RESERVE No.1, RESERVE No.2, RESERVE No.3 & RESERVE No.4
Land to be acquired by agreement: NIL

The land being subdivided is enclosed within thick continuous lines.

Survey: This plan is based on survey and is compiled from Roads Corporation SP21794B.

This plan has been connected to permanent marks no(s) 56, 85, 86, 110, 691 & 119.
In proclaimed Survey Area no. -

Easement Information

Legend: E - Encumbering Easement or Condition in Crown Grant in the Nature of an Easement
A - Appurtenant Easement R - Encumbering Easement (Road)

Easements marked (–) are existing easements.
Easements marked (+) are created upon registration of this plan.
Easements marked (✱) are created when the appropriate vesting date is recorded or transfer registered.
Easements marked (##) are removed when the appropriate vesting date is recorded or transfer registered.

Symbol	Subject Land	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
–	E-1	POWER LINE	15	LP129899	LOTS ON LP129899

LRS use only

Statement of Compliance/ Exemption Statement

Received ☑

Date 1/02/10

LRS use only

PLAN REGISTERED

Time 4.06 PM

Date 16/02/2010

RHills

Assistant Registrar of Titles

ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au

REF: 0900649

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE

DATE 15 / 10 / 09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 1 of 3 Sheets

DATE 18 / 11 / 09

COUNCIL DELEGATE SIGNATURE

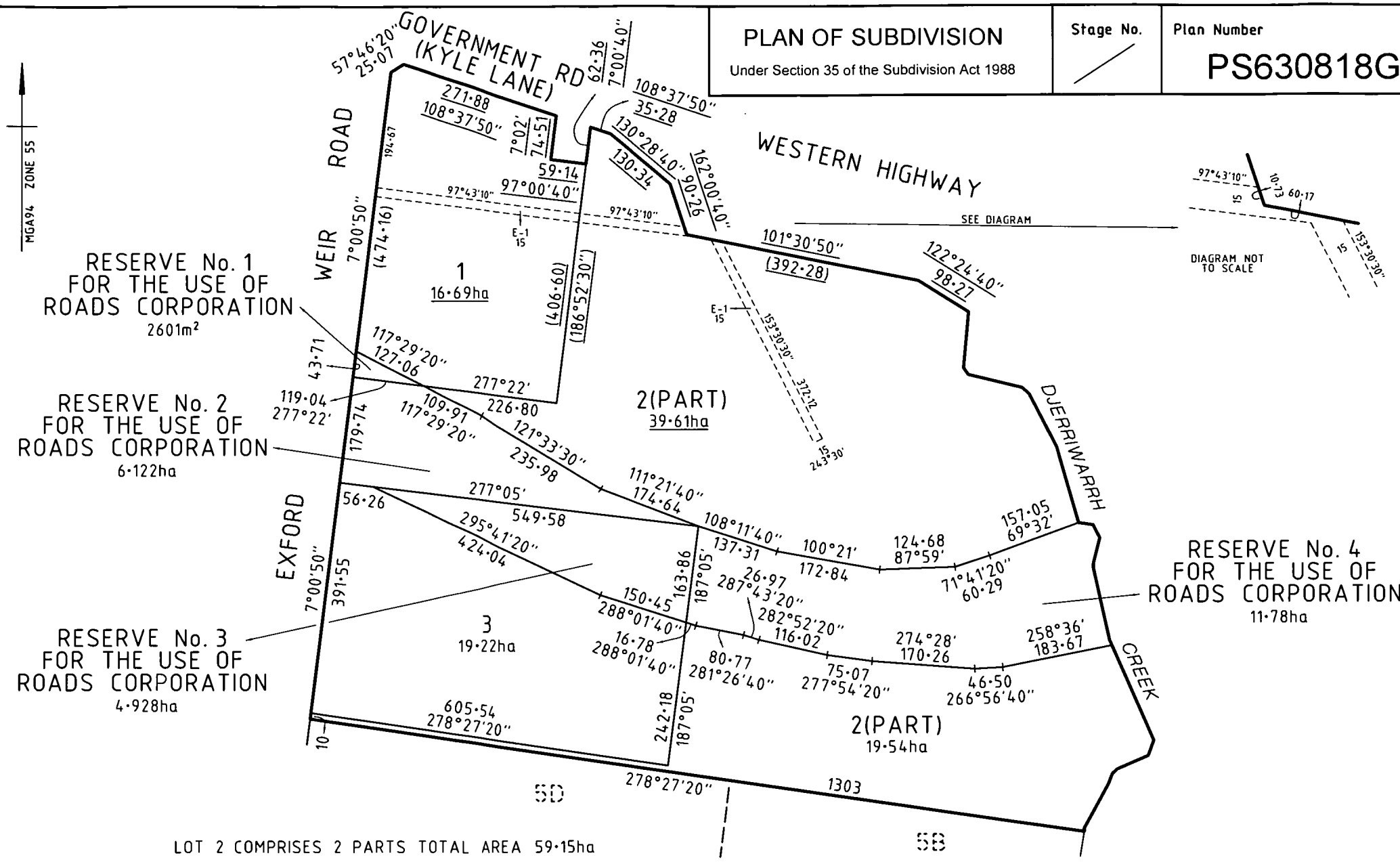
Original sheet size A3

PLAN OF SUBDIVISION

Under Section 35 of the Subdivision Act 1988

Stage No. /

Plan Number PS630818G



ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au
REF: 0900649

ORIGINAL

SCALE	SHEET SIZE
1:6000	A3

SCALE

60 0 60 120 180 240
LENGTHS ARE IN METRES

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE ..... DATE 15/10/09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 2 of 3 Sheets

DATE 18/11/09

COUNCIL DELEGATE SIGNATURE

Original sheet size A3

	PLAN OF SUBDIVISION Under Section 35 of the Subdivision Act 1988	STAGE NO. /	Plan Number PS630818G

VESTING DATES & TRANSFER REGISTRATION DATES OF ACQUIRED LAND

Land affected	Land acquired by compulsory process				Land acquired by agreement	LR reference	Assistant Registar of Titles
	Vesting date	Government Gazette		Date of recording of vesting	Date of registration of transfer		Signature
		Page	Year				
RESERVE No. 1	25TH JUNE	1609	2009		———		
RESERVE No. 2	25TH JUNE	1609 - 1610	2009		———		
RESERVE No. 3	25TH JUNE	1610	2009		———		
RESERVE No. 4	25TH JUNE	1609 - 1610	2009		———		

ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE

DATE 15/10/09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 3 of 3 Sheets

DATE 21/11/09

COUNCIL DELEGATE SIGNATURE

Original sheet size A3

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 10580 FOLIO 162 Security no : 124092145600S
Produced 30/08/2021 03:30 PM

LAND DESCRIPTION

Lot 2 on Plan of Subdivision 630818G.
PARENT TITLES :
Volume 00452 Folio 353 Volume 08916 Folio 320 Volume 09358 Folio 881
Volume 10067 Folio 551
Created by instrument PS423865C 01/05/2001

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
GEOFFREY FRANCIS SHEA
SUSAN PATRICIA SHEA both of HOPETOUN PARK ROAD BACCHUS MARSH 3340
X399975Q 04/04/2001

ENCUMBRANCES, CAVEATS AND NOTICES

CAVEAT AN989152X 29/06/2017
Caveator
NBN CO LTD ACN: 136533741
Grounds of Claim
LEASE WITH THE FOLLOWING PARTIES AND DATE.
Parties
THE REGISTERED PROPRIETOR(S)
Date
21/06/2017
Estate or Interest
LEASEHOLD ESTATE
Prohibition
ANY INSTRUMENT THAT AFFECTS MY/OUR INTEREST
Lodged by
CLAYTON UTZ
Notices to
CLAYTON UTZ of LEVEL 18 333 COLLINS STREET MELBOURNE VIC 3000

CAVEAT AQ646066E 18/01/2018
Caveator
SURI FAMILY INVESTMENTS PTY LTD ACN: 623142334
Grounds of Claim
PURCHASERS' CONTRACT WITH THE FOLLOWING PARTIES AND DATE.
Parties
THE REGISTERED PROPRIETOR(S)
Date
18/12/2017
Estate or Interest
FREEHOLD ESTATE
Prohibition
ABSOLUTELY
Lodged by
DOUROS JACKSON LAWYERS
Notices to
PETER DOUROS of LEVEL 10 356 COLLINS STREET MELBOURNE VIC 3000

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE PS630818G FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 30 KYLE LANE HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Plan**
Document Identification	**PS630818G**
Number of Pages (excluding this cover sheet)	**3**
Document Assembled	**30/08/2021 15:32**

PLAN OF SUBDIVISION

Under Section 35 of the Subdivision Act 1988

STAGE NO. /

LRS use only

EDITION 1

PS630818G

01/02/2010 $997.10 PS35

Location of Land

Parish: MERRIMU

Township:

Section: 7

Crown Allotment: 1(PART), 4A & 4B

Crown Portion:

Title Reference: VOL.10580 FOL.161, VOL.10580 FOL.162
VOL.10580 FOL.163

Last Plan Reference: LOTS 1, 2 & 3 PS423865C

Postal Address: (at time of subdivision) HOPETOUN PARK ROAD,
HOPETOUN PARK 3340
30 KYLE LANE, HOPETOUN PARK 3340
97 EXFORD WEIR ROAD,
HOPETOUN PARK 3340

MGA94 Co-ordinates (of approx. centre of plan) E 280 400
N 5 825 900
ZONE: 55

Council Certification and Endorsement

Council Name: MOORABOOL SHIRE COUNCIL **Ref:** 2009-258

A. This is a plan under section 35 of the Subdivision Act 1988 which does not create any additional lots.

B. This plan is exempt from Part 3 of the Subdivision Act 1988.

~~C. This is a plan under section 35 of the Subdivision Act 1988 which creates (an) additional lot(s).~~

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~~E. It is certified under section 11(7) of the Subdivision Act 1988.~~

~~F. Date of original certification under section 6. / /~~

G. This is a statement of compliance under section 21 of the Subdivision Act 1988.

Council Delegate
~~Council Seal~~

Date 18 / 11 / 09

~~Re-certified under section 11(7) of the Subdivision Act 1988.~~

~~Council Delegate~~
~~Council Seal~~

~~Date / /~~

Vesting of Roads and / or Reserves

Roads and reserves vest in the council/body/person named when the appropriate vesting date is recorded or transfer registered. Only roads and reserves marked thus (%) vest upon registration of this plan.

Identifier	Council/Body/Person
RESERVE No.1	ROADS CORPORATION
RESERVE No.2	ROADS CORPORATION
RESERVE No.3	ROADS CORPORATION
RESERVE No.4	ROADS CORPORATION

Notations

Staging This ~~is~~/is not a staged subdivision.
Planning Permit No: NOT APPLICABLE

Depth Limitation DOES NOT APPLY

Underlined dimensions shown thus 123.45 are not the result of this survey.
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Land to be acquired by compulsory process : RESERVE No.1, RESERVE No.2, RESERVE No.3 & RESERVE No.4
Land to be acquired by agreement: NIL

The land being subdivided is enclosed within thick continuous lines.

Survey: This plan is based on survey and is compiled from Roads Corporation SP21794B.

This plan has been connected to permanent marks no(s) 56, 85, 86, 110, 691 & 119.
In proclaimed Survey Area no. -

Easement Information

Legend: E - Encumbering Easement or Condition in Crown Grant in the Nature of an Easement
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Symbol	Subject Land	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
–	E-1	POWER LINE	15	LP129899	LOTS ON LP129899

LRS use only

Statement of Compliance/ Exemption Statement

Received ☑

Date 1/02/10

LRS use only

PLAN REGISTERED

Time 4.06 PM

Date 16/02/2010

RHills

Assistant Registrar of Titles

ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au

REF: 0900649

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE

DATE 15 / 10 / 09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 1 of 3 Sheets

DATE 18 / 11 / 09

COUNCIL DELEGATE SIGNATURE

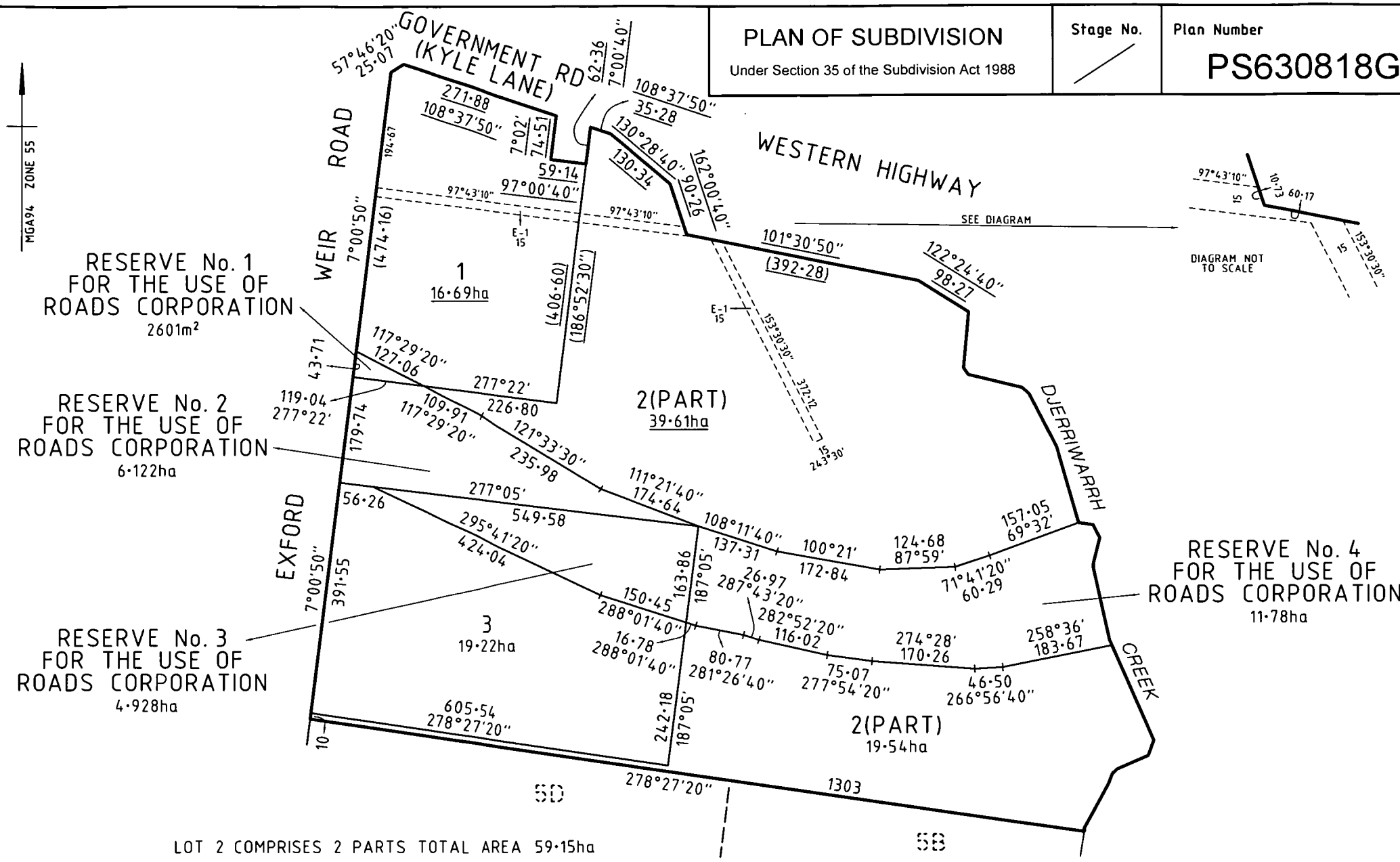
Original sheet size A3

PLAN OF SUBDIVISION

Under Section 35 of the Subdivision Act 1988

Stage No. /

Plan Number PS630818G



ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au
REF: 0900649

ORIGINAL	
SCALE	SHEET SIZE
1:6000	A3

SCALE

60 0 60 120 180 240

LENGTHS ARE IN METRES

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE ..... DATE 15/10/09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 2 of 3 Sheets

DATE 18/11/09

COUNCIL DELEGATE SIGNATURE

Original sheet size A3

	PLAN OF SUBDIVISION Under Section 35 of the Subdivision Act 1988	STAGE NO. /	Plan Number PS630818G

VESTING DATES & TRANSFER REGISTRATION DATES OF ACQUIRED LAND

Land affected	Land acquired by compulsory process				Land acquired by agreement	LR reference	Assistant Registar of Titles
	Vesting date	Government Gazette		Date of recording of vesting	Date of registration of transfer		Signature
		Page	Year				
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RESERVE No. 2	25TH JUNE	1609 - 1610	2009		———		
RESERVE No. 3	25TH JUNE	1610	2009		———		
RESERVE No. 4	25TH JUNE	1609 - 1610	2009		———		

ROADS CORPORATION

Beveridge Williams
development & environment consultants
Melbourne ph : 03 9528 4444
www.beveridgewilliams.com.au

LICENSED SURVEYOR (PRINT) LACHLAN FINLAY MACRAE

SIGNATURE

DATE 15/10/09

ROADS CORPORATION REF. JBN26376

SP21794B PS1 VERSION 1

Sheet 3 of 3 Sheets

DATE 8/11/09

COUNCIL DELEGATE SIGNATURE

Original sheet size A3

Department of Environment, Land, Water & Planning

Electronic Instrument Statement

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

Produced 30/08/2021 03:32:21 PM

Status	Registered	Dealing Number	AQ646066E
Date and Time Lodged	18/01/2018 11:09:06 AM		

Lodger Details

Lodger Code	17289A
Name	DOUROS JACKSON LAWYERS
Address	
Lodger Box	
Phone	
Email	
Reference	942S

CAVEAT

Jurisdiction VICTORIA

Privacy Collection Statement
The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

Land Title Reference
10580/162

Caveator

Name	SURI FAMILY INVESTMENTS PTY LTD
ACN	623142334

Grounds of claim
Purchasers' contract with the following Parties and Date.

Parties
The Registered Proprietor(s)

Date
18/12/2017

Estate or Interest claimed
Freehold Estate

Prohibition
Absolutely

Department of Environment, Land, Water & Planning

Electronic Instrument Statement

Name and Address for Service of Notice
Peter Douros
Address

Floor Type	LEVEL
Floor Number	10
Street Number	356
Street Name	COLLINS
Street Type	STREET
Locality	MELBOURNE
State	VIC
Postcode	3000

The caveator claims the estate or interest specified in the land described on the grounds set out. This caveat forbids the registration of any instrument affecting the estate or interest to the extent specified.

Execution

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier has taken reasonable steps to verify the identity of the caveator.

Executed on behalf of	SURI FAMILY INVESTMENTS PTY LTD
Signer Name	MARISA BUTERA
Signer Organisation	DOUROS JACKSON LAWYERS
Signer Role	LAW PRACTICE
Execution Date	18 JANUARY 2018

File Notes:
NIL

This is a representation of the digitally signed Electronic Instrument or Document certified by Land Use Victoria.

Statement End.

Department of Environment, Land, Water & Planning

Electronic Instrument Statement

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

Produced: 30/08/2021 03:32:21 PM

Dealing Number: AN989152X

Status: Registered
Date and Time Lodged: 29/06/2017 08:24:00 AM
Responsible Subscriber: CLAYTON UTZ
Customer Code: 19278U
Reference: smh/an/80183991

CAVEAT

Privacy Collection Statement
The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

The caveator claims the estate or interest specified in the land described on the grounds set out. This caveat forbids the registration of any instrument affecting the estate or interest to the extent specified.

Land:

Volume 10580 Folio 162

Caveator:

NBN CO LTD ACN: 136533741

Grounds of claim:

Lease with the following Parties and Date.
Parties
The Registered Proprietor(s)
Date
21/06/2017

Estate or Interest claimed:

LAND USE VICTORIA, 2 Lonsdale Street Melbourne Victoria 3000
GPO Box 527 Melbourne VIC 3001, DX 250639
ABN 90 719 052 204

Department of Environment, Land, Water & Planning

Electronic Instrument Statement

Leasehold Estate

Prohibition:

Any instrument that affects my/our interest

Name and Address for service of notice:

Clayton Utz of Level 18 333 Collins Street Melbourne VIC 3000

Subscriber Certifications:

1. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
2. The Certifier has retained the evidence supporting this Registry Instrument or Document.
3. The Certifier has taken reasonable steps to verify the identity of the caveator.

Signed by:
Alison Kennedy
(for CLAYTON UTZ)
on behalf of NBN CO LTD
Dated: 28 June 2017

File Notes:
NIL

This is a representation of the digitally signed Electronic Instrument or Document certified by Land Use Victoria.

Statement End.

LAND USE VICTORIA, 2 Lonsdale Street Melbourne Victoria 3000
GPO Box 527 Melbourne VIC 3001, DX 250639
ABN 90 719 052 204

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09614 FOLIO 907 Security no : 124092146350B
Produced 30/08/2021 03:42 PM

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 145516.
PARENT TITLES :
Volume 01679 Folio 706 Volume 02685 Folio 916 Volume 03139 Folio 770
Volume 03986 Folio 040
Created by instrument LP145516 14/06/1985

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
ROSE MIFSUD
ORESTE MIFSUD both of 189 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340
AS128309C 01/05/2019

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP145516 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 189 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Plan**
Document Identification	**LP145516**
Number of Pages (excluding this cover sheet)	**1**
Document Assembled	**30/08/2021 15:43**

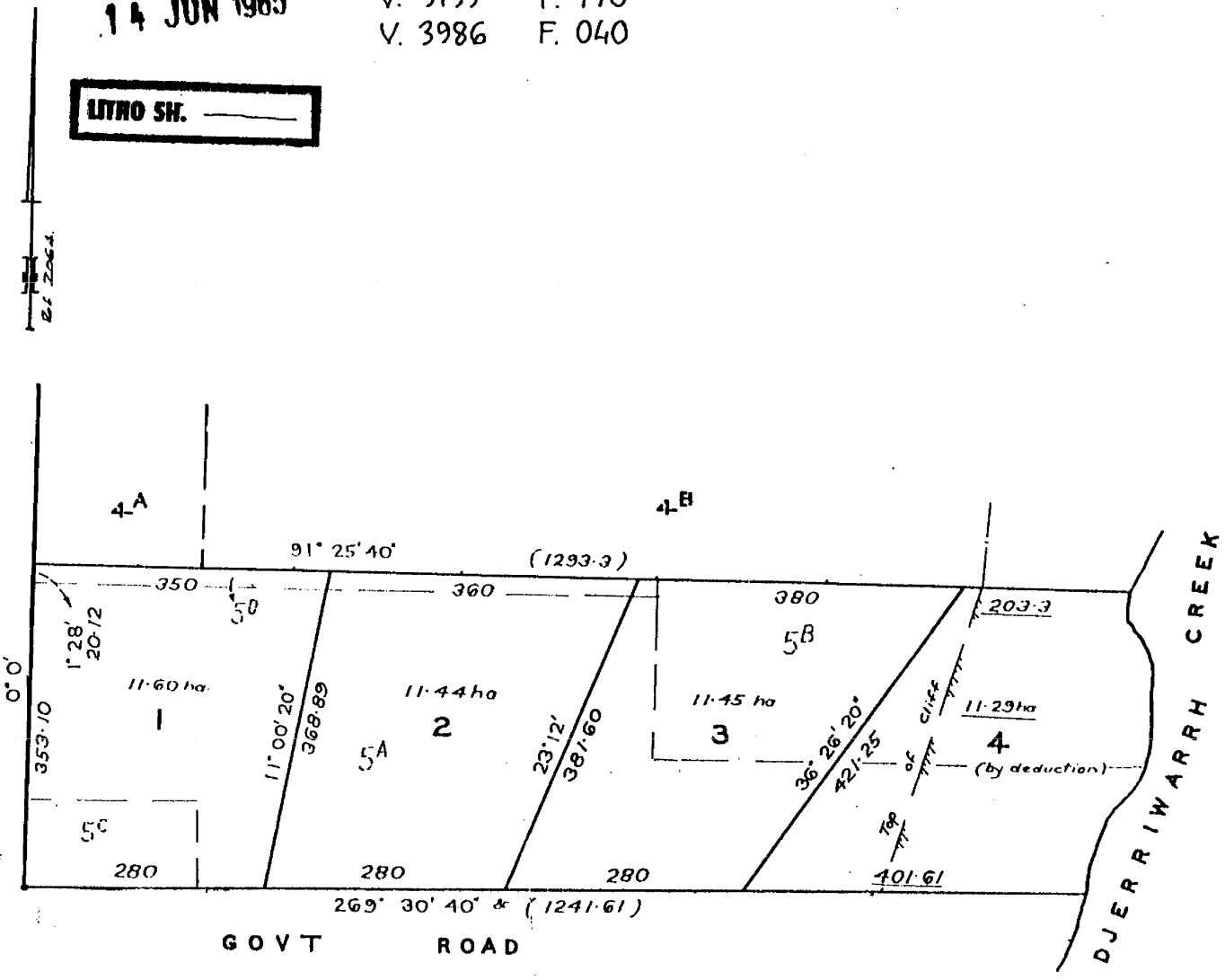
LP145516T
EDITION 1
APPROVED 14/6/85

PLAN OF SUBDIVISION OF:	APPROPRIATIONS	ENCUMBRANCES & OTHER NOTATIONS
CROWN ALLOTS 5A, 5B, 5C & 5D SECTION 7 PARISH: OF MERRIMU COUNTY: OF BOURKE 100 50 0 100 200 LENGTHS ARE IN METRES		DEPTH LIMITATION: 15·24m (CA 5B, 5C & 5D)

V. 1679 F. 706
V. 2685 F. 916
V. 3139 F. 770
V. 3986 F. 040

APPROVED
14 JUN 1985

LITHO SH. ——



REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09614 FOLIO 908 Security no : 124092153713Y
Produced 30/08/2021 05:59 PM

LAND DESCRIPTION

Lot 2 on Plan of Subdivision 145516.
PARENT TITLES :
Volume 01679 Folio 706 Volume 02685 Folio 916 Volume 03139 Folio 770
Volume 03986 Folio 040
Created by instrument LP145516 14/06/1985

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
DENIS JOHN GRIEVE
WENDY JANE GRIEVE both of HOPETOUN PARK RD BACCHUS MARSH 3340
X221051A 19/12/2000

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE X221052W 19/12/2000
COMMONWEALTH BANK OF AUSTRALIA

CAVEAT AQ898423X 06/04/2018
Caveator
WERIBEE WATERS PTY LTD ACN: 623788689
Grounds of Claim
PURCHASERS' CONTRACT WITH THE FOLLOWING PARTIES AND DATE.
Parties
THE REGISTERED PROPRIETOR(S)
Date
18/01/2018
Estate or Interest
FREEHOLD ESTATE
Prohibition
ABSOLUTELY
Lodged by
WYNDHAM PARTNERS
Notices to
DOMINIC BARTALOTTA of UNIT 2 36 SYNNOT STREET WERRIBEE VIC 3030

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP145516 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 219 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

AQ378020X NOMINATION TO PAPER INST. 24/10/2017
eCT Nominated to Discharge of Mortgage TO COMMONWEALTH BANK

eCT Control 15940N CBA - COMMONWEALTH BANK OF AUSTRALIA
Effective from 23/10/2016

DOCUMENT END

Imaged Document Cover Sheet

The document following this cover sheet is an imaged document supplied by LANDATA®, Victorian Land Registry Services.

Document Type	**Plan**
Document Identification	**LP145516**
Number of Pages (excluding this cover sheet)	**1**
Document Assembled	**30/08/2021 18:00**

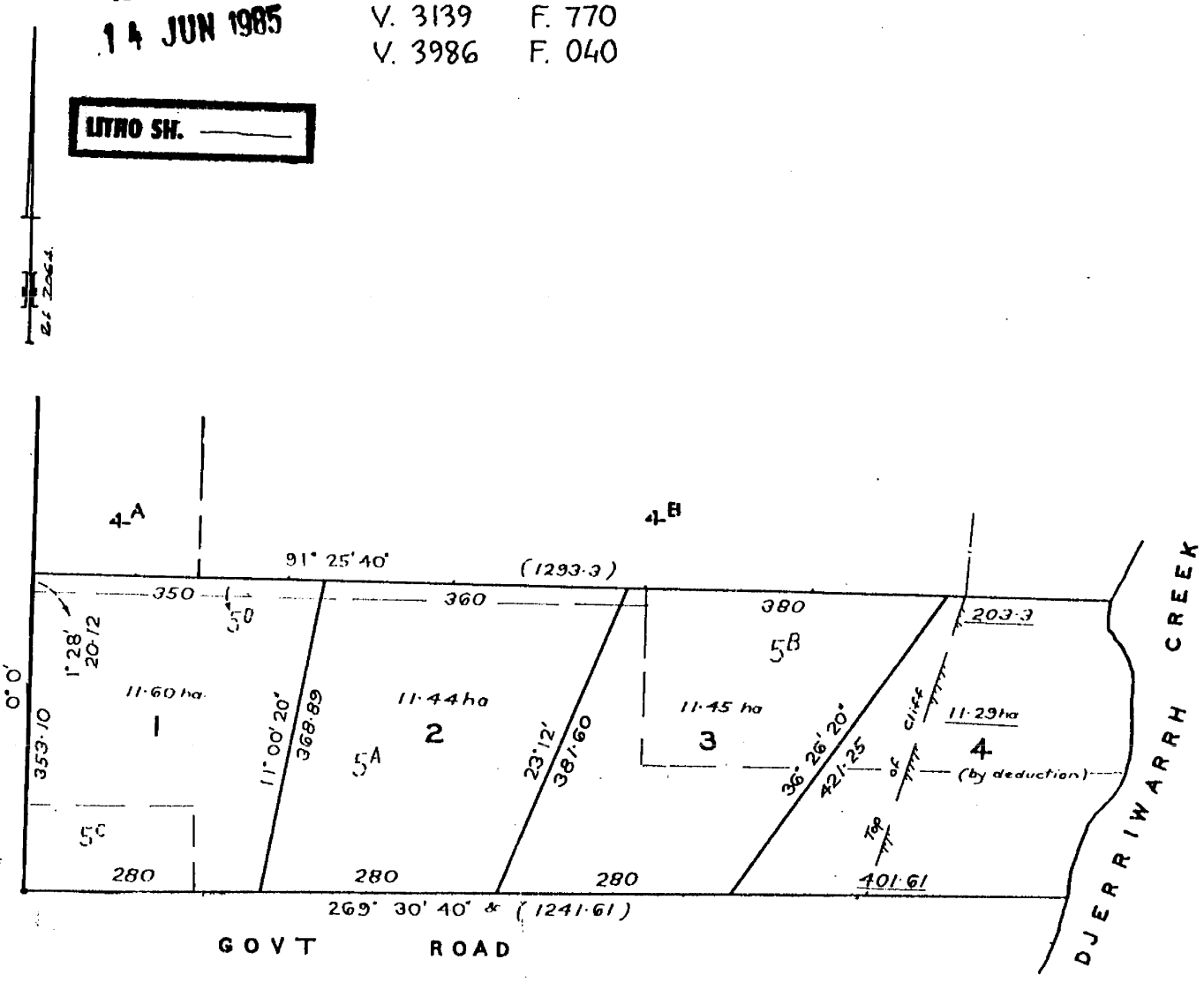
LP145516T
EDITION 1
APPROVED 14/6/85

PLAN OF SUBDIVISION OF:	APPROPRIATIONS	ENCUMBRANCES & OTHER NOTATIONS
CROWN ALLOTS 5A, 5B, 5C & 5D SECTION 7 PARISH: OF MERRIMU COUNTY: OF BOURKE 100 50 0 100 200 LENGTHS ARE IN METRES		DEPTH LIMITATION: 15·24m (CA 5B, 5C & 5D)

V. 1679 F. 706
V. 2685 F. 916
V. 3139 F. 770
V. 3986 F. 040

APPROVED
14 JUN 1985

LITHO SH. ——



REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09614 FOLIO 909 Security no : 124092153853W
Produced 30/08/2021 06:09 PM

LAND DESCRIPTION

Lot 3 on Plan of Subdivision 145516.
PARENT TITLES :
Volume 01679 Folio 706 Volume 02685 Folio 916 Volume 03139 Folio 770
Volume 03986 Folio 040
Created by instrument LP145516 14/06/1985

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
ANNA & ZHAO INVESTMENT PTY LTD of 24 FREDERICK STREET BALWYN VIC 3104
AR071529J 29/05/2018

ENCUMBRANCES, CAVEATS AND NOTICES

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ACTIVITY IN THE LAST 125 DAYS

NUMBER		STATUS	DATE
AU352257A (E)	DISCHARGE OF MORTGAGE	Registered	18/05/2021
AU372830H (E)	TRANSFER CONTROL OF ECT	Completed	24/05/2021

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 249 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

NIL

eCT Control 22887Y JURIS NEXUS
Effective from 24/05/2021

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**LP145516**
Number of Pages (excluding this cover sheet)	**1**
Document Assembled	**30/08/2021 18:11**

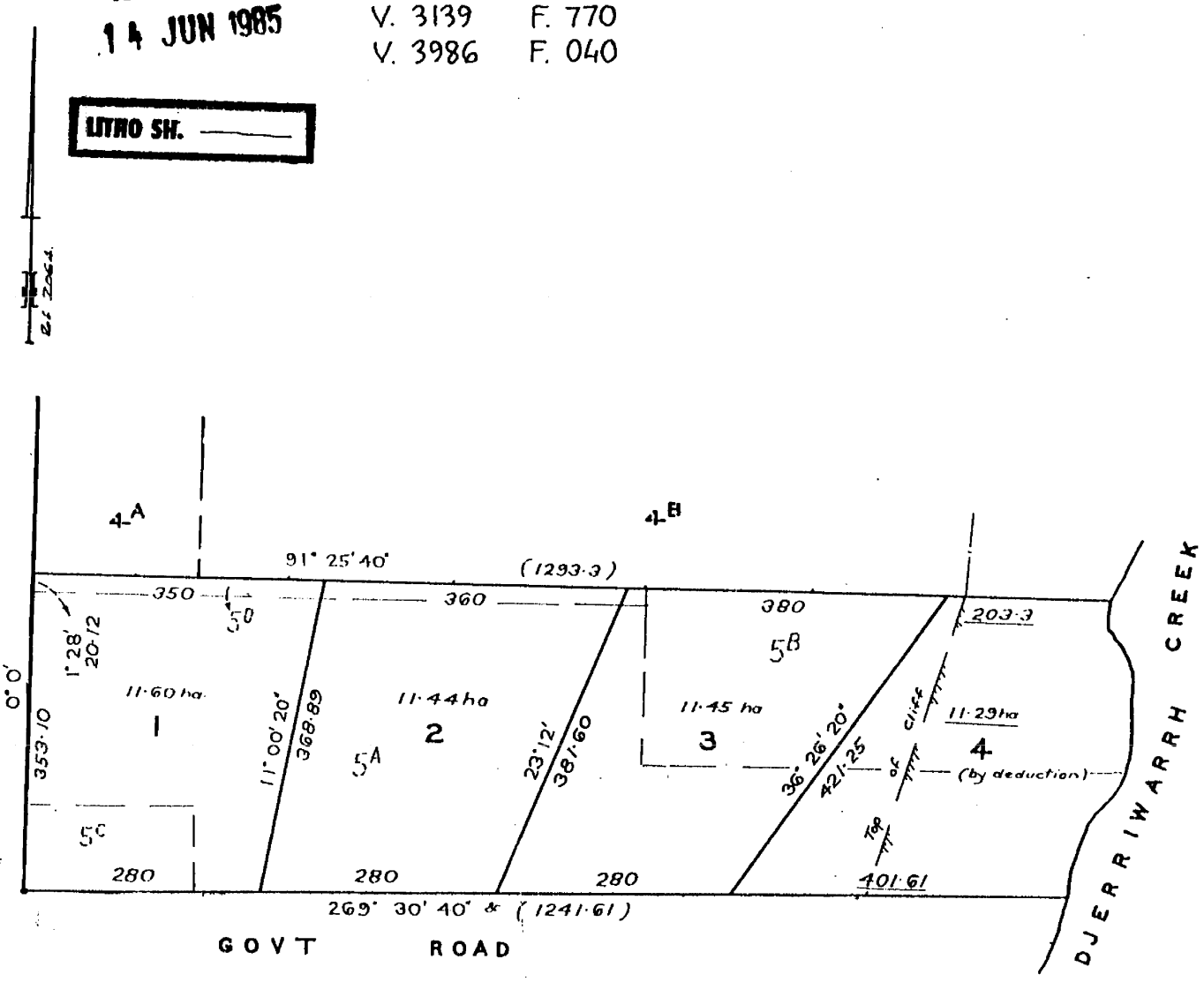
LP145516T
EDITION 1
APPROVED 14/6/85

PLAN OF SUBDIVISION OF:	APPROPRIATIONS	ENCUMBRANCES & OTHER NOTATIONS
CROWN ALLOTS 5A, 5B, 5C & 5D SECTION 7 PARISH: OF MERRIMU COUNTY: OF BOURKE 100 50 0 100 200 LENGTHS ARE IN METRES		DEPTH LIMITATION: 15·24m (CA 5B, 5C & 5D)

V. 1679 F. 706
V. 2685 F. 916
V. 3139 F. 770
V. 3986 F. 040

APPROVED
14 JUN 1985

LITHO SH. ——



REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09614 FOLIO 910 Security no : 124092153894B
Produced 30/08/2021 06:15 PM

LAND DESCRIPTION

Lot 4 on Plan of Subdivision 145516.
PARENT TITLES :
Volume 01679 Folio 706 Volume 02685 Folio 916 Volume 03139 Folio 770
Volume 03986 Folio 040
Created by instrument LP145516 14/06/1985

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
AUSTRALIA INFINITY INVESTMENT PTY LTD of 12 EDINBURGH STREET BOX HILL SOUTH VIC 3128
AS623974D 16/10/2019

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP145516 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 259 HOPETOUN PARK ROAD HOPETOUN PARK VIC 3340

DOCUMENT END

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Document Type	**Plan**
Document Identification	**LP145516**
Number of Pages (excluding this cover sheet)	**1**
Document Assembled	**30/08/2021 18:18**

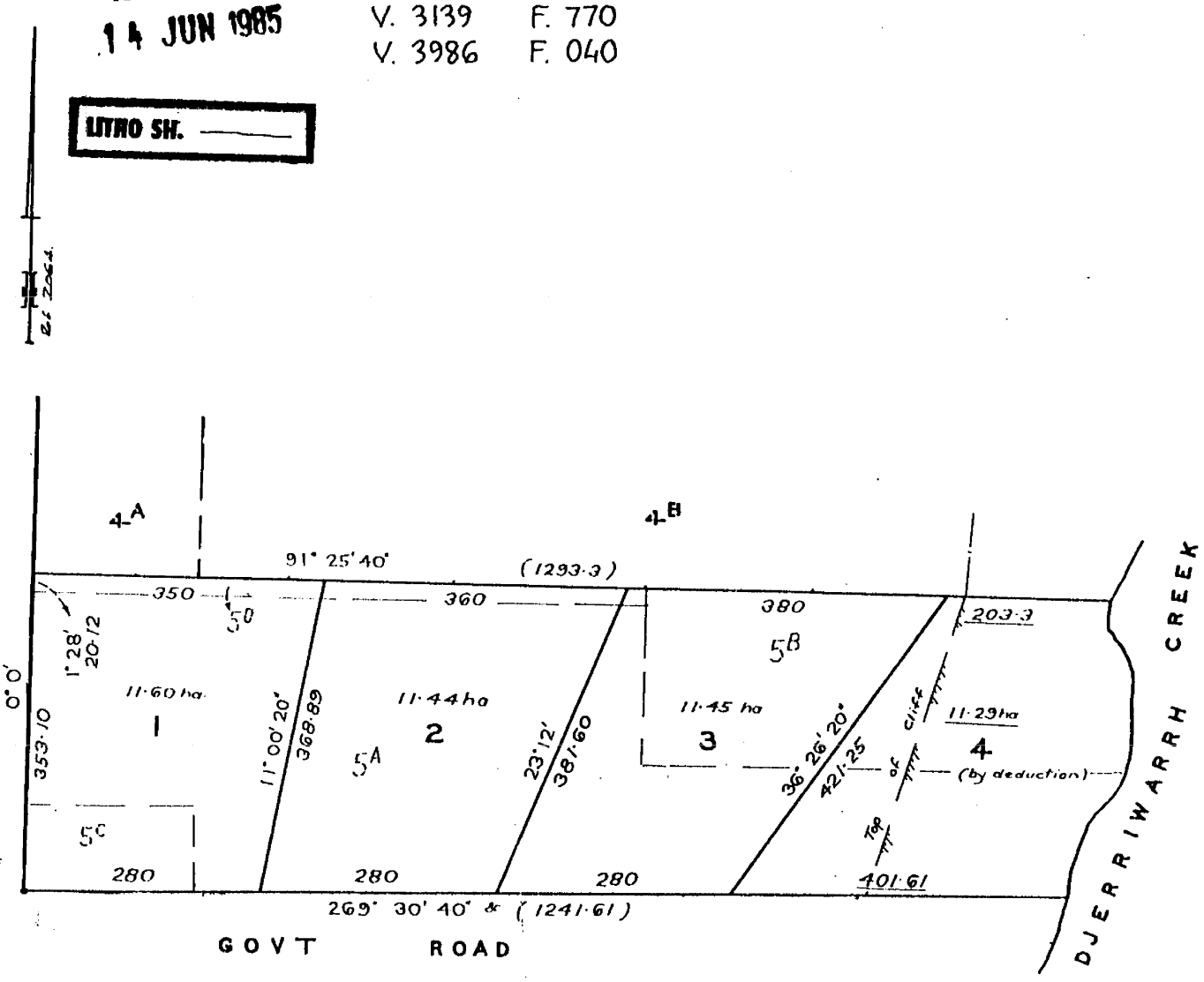
LP145516T
EDITION 1
APPROVED 14/6/85

PLAN OF SUBDIVISION OF:	APPROPRIATIONS	ENCUMBRANCES & OTHER NOTATIONS
CROWN ALLOTS 5A, 5B, 5C & 5D SECTION 7 PARISH: OF MERRIMU COUNTY: OF BOURKE 100 50 0 100 200 LENGTHS ARE IN METRES		DEPTH LIMITATION: 15·24m (CA 5B, 5C & 5D)

V. 1679 F. 706
V. 2685 F. 916
V. 3139 F. 770
V. 3986 F. 040

APPROVED
14 JUN 1985

LITHO SH. ——



REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 07013 FOLIO 484

Security no : 124092154008D
Produced 30/08/2021 06:25 PM

CROWN GRANT

LAND DESCRIPTION

Crown Allotment 6A Section 15 Parish of Merrimu.

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
DELLIOS BROS. PTY LTD of 209 NICHOLSON ST FOOTSCRAY
M554885U 10/11/1986

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE T767088Q 12/07/1995
NATIONAL AUSTRALIA BANK LTD

Any crown grant reservations exceptions conditions limitations and powers noted on the plan or imaged folio set out under DIAGRAM LOCATION below. For details of any other encumbrances see the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP303309S FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: COWANS ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LIMITED
Effective from 22/10/2016

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**TP303309S**
Number of Pages (excluding this cover sheet)	**3**
Document Assembled	**30/08/2021 18:27**

TITLE PLAN		EDITION 1	TP 303309S

Location of Land

Parish: MERRIMU
Township:
Section: 15
Crown Allotment: 6A
Crown Portion:

Last Plan Reference:
Derived From: VOL 7013 FOL 484
Depth Limitation: 50 FEET

Notations

SUBJECT TO THE RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS CONTAINED IN CROWN GRANT VOL. 7013 FOL. 484 AND NOTED ON SHEET 2 OF THIS PLAN

WATERWAY NOTATION: LAND IN THIS PLAN MAY ABUT CROWN LAND THAT MAY BE SUBJECT TO A CROWN LICENCE TO USE

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

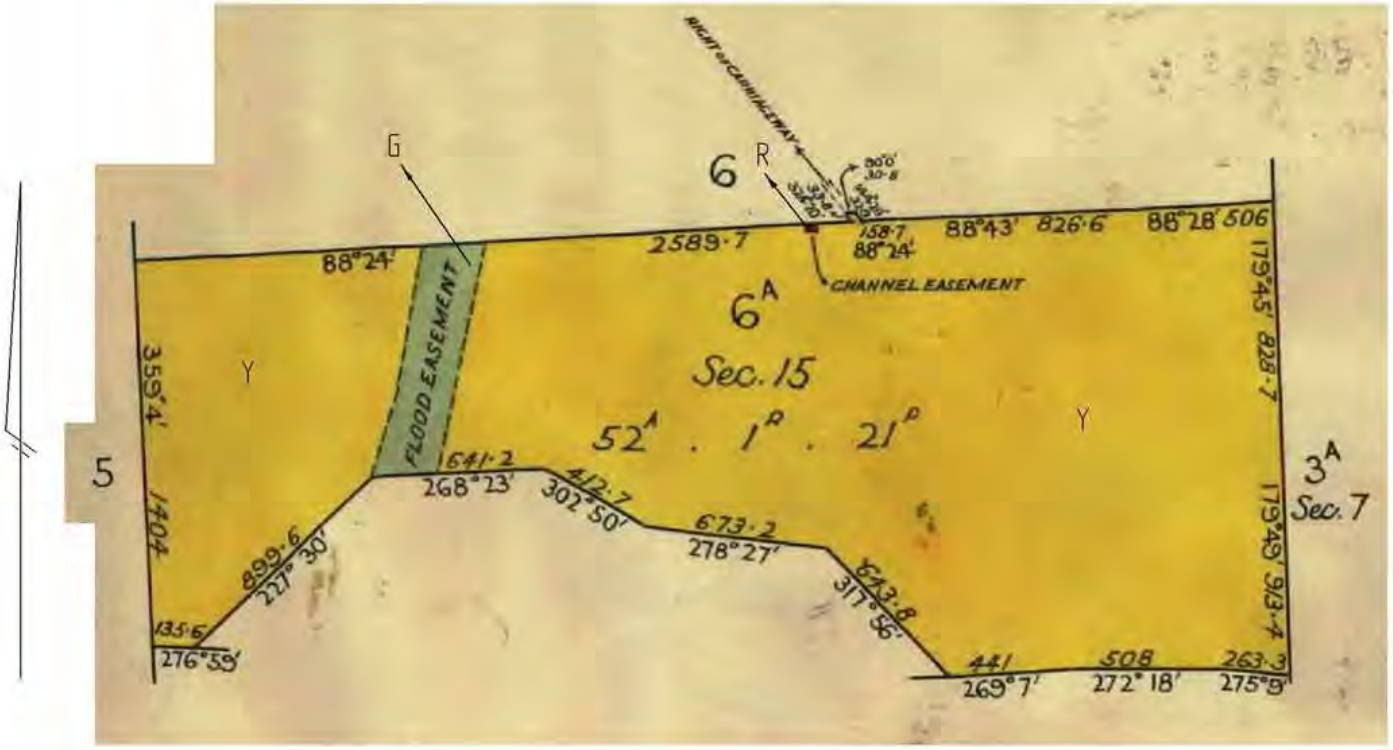
E-1 = SEWERAGE EASEMENT TO WESTERN REGION WATER AUTHORITY CREATED BY C/E U289491S

AND GAS SUPPLY PURPOSES EASEMENT TO GASCOR CREATED BY C/E U307643M

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 03/02/2000
VERIFIED: C.L.

SEE SHEET 3 FOR FURTHER EASEMENT DETAILS

COLOUR CODE
G = GREEN R = RED Y = YELLOW



LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 3 sheets

TITLE PLAN		TP 303309S

LAND DESCRIPTION INCLUDING RESERVATIONS EXCEPTIONS CONDITIONS AND POWERS SHOWN ON THE CROWN GRANT

ALL THAT PIECE OF LAND in the said State containing fifty-two acres one rood and twenty-one perches more or less being Allotment six[A] of Section fifteen in the Parish of Merrimu County of Bourke —

→ Together with the Right of Carriage-way created by Instrument No. 1876702 in the Register Book of the Office of Titles

delineated with the measurements and abuttals thereof in the map drawn in the margin of these presents and therein colored yellow ~~and~~ red and green ← PROVIDED nevertheless that the grantee shall be entitled to sink wells for water and to the use and enjoyment of any wells or springs of water upon or within the boundaries of the said land for any and for all purposes as though he held the land without limitation as to depth EXCEPTING nevertheless unto Us Our heirs and successors all gold and silver and minerals as defined in the *Mines Act* 1928 in upon or under or within the boundaries of the land hereby granted AND reserving to Us Our heirs and successors free liberty and authority for Us Our heirs and successors and Our and their licensees agents and servants at any time or times hereafter to enter upon the said land and to search and mine therein for gold silver and minerals as aforesaid and to extract and remove therefrom any such gold silver and minerals and to search for and work dispose of and carry away the said gold silver and minerals lying in upon or under the land hereby granted and for the purposes aforesaid to sink shafts make drives erect machinery and to carry on any works and do any other things which may be necessary or usual in mining and with all other incidents that are necessary to be used for the getting of the said gold silver and minerals and the working of all mines seams lodes and deposits containing such gold silver and minerals in upon or under the land hereby granted AND ALSO reserving to Us Our heirs and successors—

(i) all petroleum as defined in the *Mines (Petroleum) Act* 1935 on or below the surface of the said land and
(ii) the right of access for the purpose of searching for and for the operations of obtaining such petroleum in any part or parts of the said land and
(iii) rights of way for access and for pipe-lines and other purposes necessary for obtaining and conveying such petroleum in the event of such petroleum being obtained in any part or parts of the said land

It is a further condition that the State Rivers and Water Supply Commission shall have all that the full and free right and liberty to and for it and its servants agents and workmen at all times hereafter to enter in and upon so much of the said land as is approximately shown by red color in the said map and to clear the same of obstructions and to dig out excavate and construct a water channel and waterworks for the purposes of water supply and drainage through in and upon the said land colored red in such manner and of such width depth and nature as the said Commission may deem advisable and to use such channel and waterworks for all purposes of water supply and drainage and also to repair and alter the said channel and waterworks and also to deposit or place and allow to remain on or along the said land colored red or any part thereof all timber earth soil stone gravel or other substance matter or thing which may be removed or excavated in clearing the said land colored red or in the making or construction of the said channel and waterworks or in repairing or altering the same and also to go pass and repass for all the purposes aforesaid either with or without horses or other animals carts or other carriages through over and along the land colored red aforesaid.

PROVIDED ALWAYS that the said land is and shall be subject to be resumed for mining purposes under Section 168 of the *Land Act* 1928.

AND PROVIDED also that the said land is and shall be subject to the right of any person being the holder of a miner's right or of a mining lease or mineral lease under the *Mines Act* 1928 or any corresponding previous enactment to enter therein and to mine for gold silver or minerals within the meaning of the said Act and to erect and occupy mining plant or machinery thereon in the same manner and under the same conditions and provisions as those to which such person would for the time being be entitled to mine for gold and silver in and upon Crown lands PROVIDED that compensation shall be paid to the said

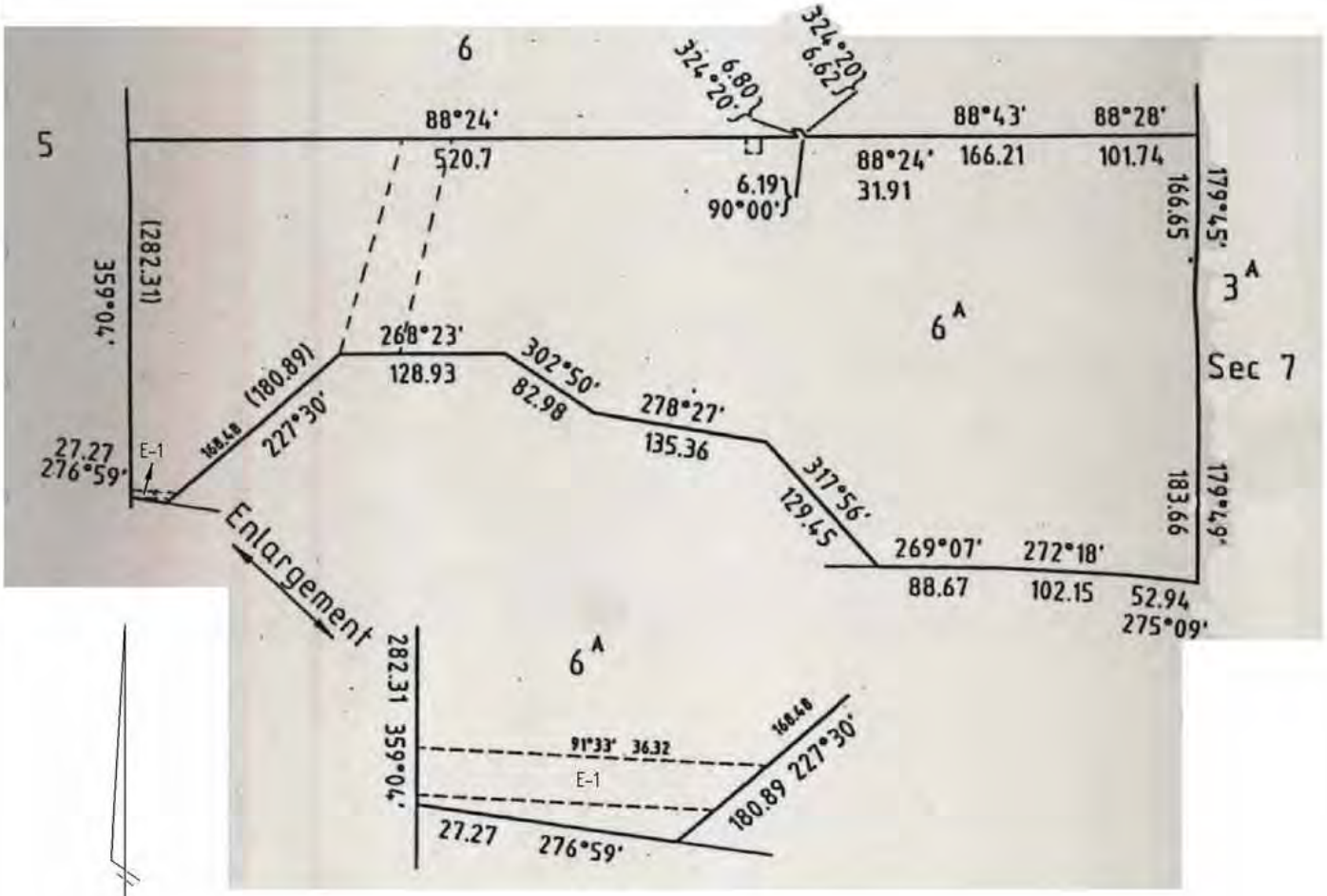
— GRANTEE

his executors administrators assigns or transferees by such person for surface damage to be done to such land by reason of mining thereon such compensation to be determined as provided for the time being by law and the payment thereof to be a condition precedent to such right of entry.

It is an express condition on which this Grant is made that neither the grantee nor any body or person claiming from under or through him shall have or make any claim or demand upon Us or upon Our heirs or successors or upon the State Rivers and Water Supply Commission Our their or its tenants officers workmen or servants in respect of or incidental to any seepage or flooding or other damage that may occur or happen or result upon that portion of the land hereby granted shown by green color in the map in the margin hereof.

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 2 of 3 sheets

	TITLE PLAN		TP 303309S



LENGTHS ARE IN METRES	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 3 of 3 sheets

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 03623 FOLIO 530 Security no : 124092154006F
Produced 30/08/2021 06:25 PM

LAND DESCRIPTION

Lot 1 on Title Plan 749719H (formerly known as part of Crown Allotment 6 Section 15 Parish of Merrimu).
PARENT TITLES :
Volume 01328 Folio 599 Volume 03540 Folio 955
Created by instrument 1524689R 06/06/1912

REGISTERED PROPRIETOR

Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 3 equal undivided shares
Sole Proprietor
NICHOLAS STANLEY DELLIOS of LERDERDERG GORGE RD BACCHUS MARSH 3340
As to 2 of a total of 3 equal undivided shares
Sole Proprietor
DELLIOS BROS PTY LTD of LEVEL 6/161 COLLINS ST MELBOURNE 3000
U572431V 30/12/1996

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE U572433P 30/12/1996
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP749719H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: COWANS ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LIMITED
Effective from 22/10/2016

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**TP749719H**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**30/08/2021 18:27**

TITLE PLAN

EDITION 1

TP 749719H

LOCATION OF LAND

Parish : MERRIMU
Township: -
Section: 15
Crown Allotment: 6 (PT)
Crown Portion: -

Last Plan Reference : -
Derived From: VOL. 3623 FOL. 530

Depth Limitation : NIL

Notations

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land/ Easement Information

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA FOR TITLE DIAGRAM PURPOSES

COMPILED: Date: 8/02/08

VERIFIED: A. DALLAS

Assistant Registrar of Titles

ENCUMBRANCES

AS TO THE LAND MARKED E-1
THE EASEMENT TO S.R. & W.S.C. CREATED BY INSTRUMENT 1876702

AS TO THE LAND MARKED E-2
THE EASEMENT TO S.R. & W.S.C. CREATED BY INSTRUMENT 1687711

AS TO THE LAND MARKED E-3 & E-4
THE EASEMENT TO S.R. & W.S.C. CREATED BY INSTRUMENT A394018

AS TO THE LAND MARKED E-4
THE EASEMENT CREATED BY INSTRUMENTS E853648 & F89110

APPURTENANCIES

TOGETHER WITH A RIGHT OF CARRIAGEWAY OVER THE ROAD MARKED A-1 ON THE SAID MAP

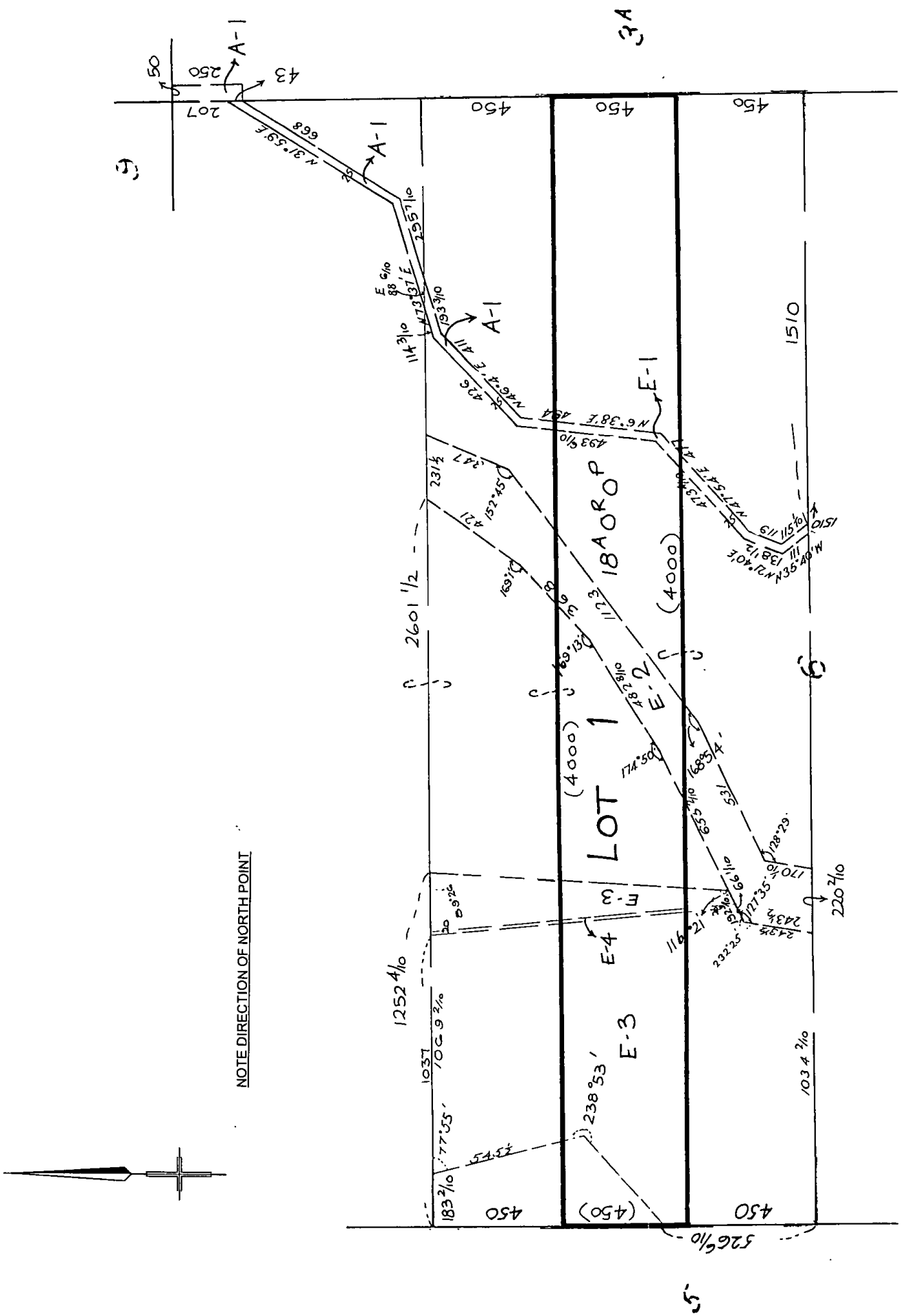
FOR DIAGRAM SEE SHEET 2

TABLE OF PARCEL IDENTIFIERS
WARNING: Where multiple parcels are referred to or shown on the Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962
LOT 1 = CROWN ALLOT 6 (PT) SECTION 15

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 2 Sheets

TITLE PLAN

TP 749719H



LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 2 of 2 Sheets

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 04072 FOLIO 351 Security no : 124092154007E
Produced 30/08/2021 06:25 PM

LAND DESCRIPTION

Lot 1 on Title Plan 414231K (formerly known as part of Crown Allotment 6 Section 15 Parish of Merrimu).
PARENT TITLES :
Volume 01328 Folio 599 Volume 03540 Folio 955
Created by instrument 0829685 04/07/1917

REGISTERED PROPRIETOR

Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 3 equal undivided shares
Sole Proprietor
NICHOLAS STANLEY DELLIOS of LERDERDERG GORGE RD BACCHUS MARSH 3340
As to 2 of a total of 3 equal undivided shares
Sole Proprietor
DELLIOS BROS PTY LTD of LEVEL 6/161 COLLINS ST MELBOURNE 3000
U572432S 30/12/1996

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE U572433P 30/12/1996
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP414231K FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: COWANS ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LIMITED
Effective from 22/10/2016

DOCUMENT END

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Document Type	**Plan**
Document Identification	**TP414231K**
Number of Pages (excluding this cover sheet)	**2**
Document Assembled	**30/08/2021 18:27**

TITLE PLAN		EDITION 1	TP 414231K

Location of Land

Parish: MERRIMU
Township:
Section: 15
Crown Allotment: 6 (PT)
Crown Portion:

Last Plan Reference:
Derived From: VOL 4072 FOL 351
Depth Limitation: NIL

Notations

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

All that piece of Land, delineated and coloured red on the map in the margin containing Eighteen acres or thereabouts -- being part of Crown Allotment Six Section Fifteen Parish of Merrimu County --- of Bourke Together with a right of carriage way over the roads coloured brown --- on the said map -

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 20-04-2000
VERIFIED: A.D.

COLOUR CODE
R = RED BR = BROWN

E-1 = EASEMENT TO STATE RIVERS & WATER SUPPLY COMMISSION CREATED BY C/E 1687711

E-2 = EASEMENT TO STATE RIVERS & WATER SUPPLY COMMISSION CREATED BY C/E 1876702

E-3 = EASEMENT TO STATE RIVERS & WATER SUPPLY COMMISSION CREATED BY C/E A394018

E-4 = EASEMENT TO STATE RIVERS & WATER SUPPLY COMMISSION CREATED BY C/E A394018 & EASEMENTS CREATED BY C/E E853648 & C/E F89110

SEE SHEET 2 FOR FURTHER EASEMENT DETAILS

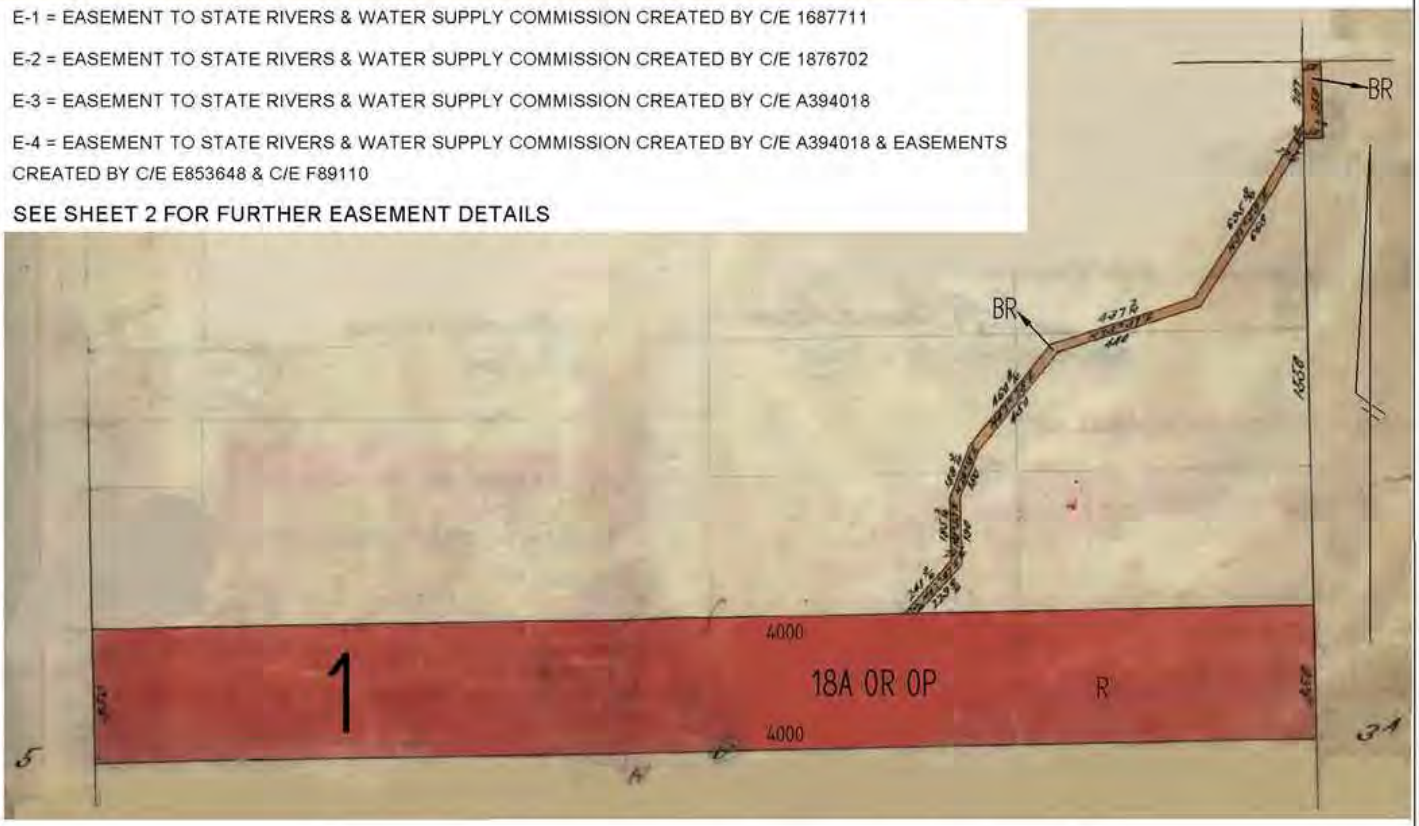
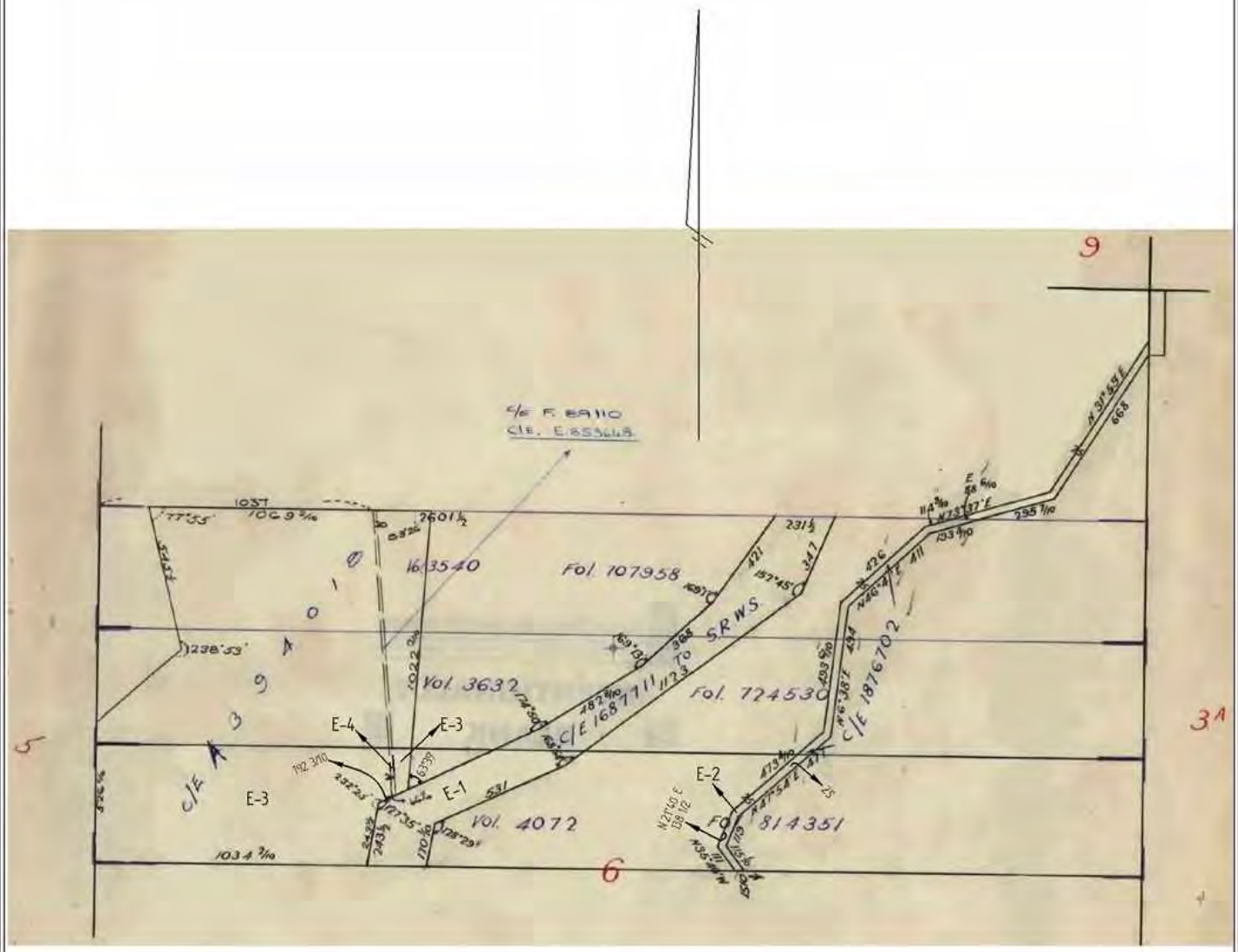


TABLE OF PARCEL IDENTIFIERS
WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962
PARCEL 1 = CA 6 (PT)

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 2 sheets

	TITLE PLAN		TP 414231K



LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 2 of 2 sheets

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 03540 FOLIO 958 Security no : 124092154005G
Produced 30/08/2021 06:25 PM

LAND DESCRIPTION

Lot 1 on Title Plan 681605Y (formerly known as part of Crown Allotment 6 Section 15 Parish of Merrimu).
PARENT TITLES :
Volume 01328 Folio 599 Volume 03540 Folio 955
Created by instrument 653044 12/06/1911

REGISTERED PROPRIETOR

Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 3 equal undivided shares
Sole Proprietor
NICHOLAS STANLEY DELLIOS of LERDERDERG GORGE RD BACCHUS MARSH 3340
As to 2 of a total of 3 equal undivided shares
Sole Proprietor
DELLIOS BROS PTY LTD of LEVEL 6/161 COLLINS ST MELBOURNE 3000
U572430Y 30/12/1996

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE U572433P 30/12/1996
NATIONAL AUSTRALIA BANK LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE TP681605Y FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: COWANS ROAD HOPETOUN PARK VIC 3340

ADMINISTRATIVE NOTICES

NIL

eCT Control 16089P NATIONAL AUSTRALIA BANK LIMITED
Effective from 22/10/2016

DOCUMENT END

Imaged Document Cover Sheet

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Document Type	**Plan**
Document Identification	**TP681605Y**
Number of Pages (excluding this cover sheet)	**1**
Document Assembled	**30/08/2021 18:27**

TITLE PLAN		EDITION 1	TP 681605Y

Location of Land

Parish: MERRIMU
Township:
Section: 15
Crown Allotment: 6 (PT)
Crown Portion:

Last Plan Reference:
Derived From: VOL 3540 FOL 958
Depth Limitation: NIL

Notations

ANY REFERENCE TO MAP IN THE TEXT MEANS THE DIAGRAM SHOWN ON THIS TITLE PLAN

Description of Land / Easement Information

All that piece of Land, delineated and coloured red on the map in the margin containing Eighteen acres or thereabouts --- being part of Crown Allotment six Section fifteen Parish of Merrimu County of ---- Bourke Together with a right of carriage way over the roads colored brown on the said map -

THIS PLAN HAS BEEN PREPARED FOR THE LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES AS PART OF THE LAND TITLES AUTOMATION PROJECT
COMPILED: 09/11/2000
VERIFIED: AK

COLOUR CODE
BR = BROWN
R, E-1, E-2, E-3, E-4 = RED

E-1 = EASEMENT TO SRWSC CREATED BY C/E 1876702
E-2 = EASEMENT TO SRWSC CREATED BY C/E 1687711
E-3 & E-4 = EASEMENT TO SRWSC CREATED BY C/E A394018
E-4 = EASEMENT CREATED BY C/E E853648 & F89110

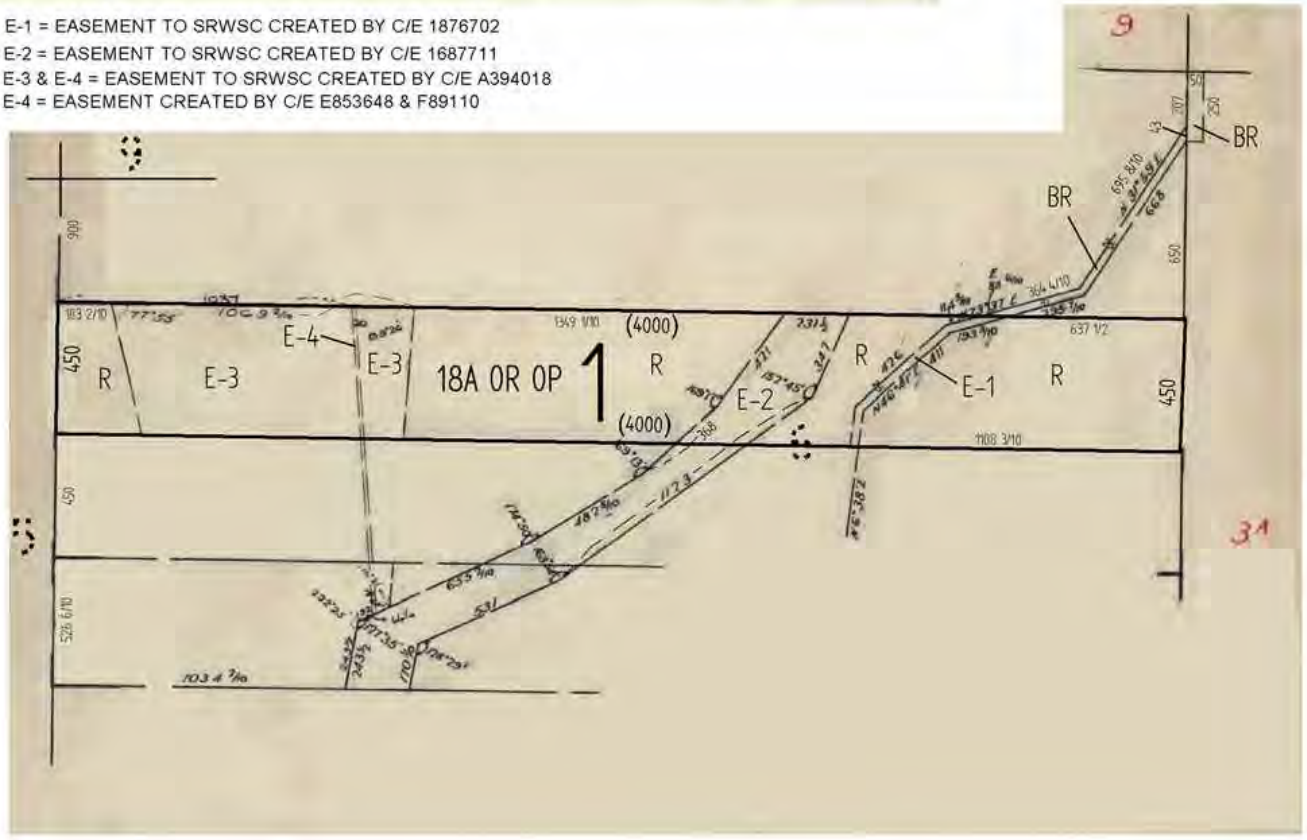

TABLE OF PARCEL IDENTIFIERS
WARNING: Where multiple parcels are referred to or shown on this Title Plan this does not imply separately disposable parcels under Section 8A of the Sale of Land Act 1962
PARCEL 1 = CA 6 (PT)

LENGTHS ARE IN LINKS	Metres = 0.3048 x Feet Metres = 0.201168 x Links		Sheet 1 of 1 sheets

Appendix E – Groundwater Resource Report

Groundwater Resource Report

Groundwater catchment: West Port Phillip Bay

VICGRID94 Easting: 2457144 Northing: 2422989

Depth to water table: > 50m

Water table salinity (mg/L): 3501 - 7000

Groundwater layers (Aquifers and Aquitards)	Depth below surface (m)	Groundwater salinity (mg/L)
UTB Upper Tertiary / Quaternary Basalt basalt (fractured rock)	0 - 23	Unknown
UTAF Upper Tertiary Aquifer (fluvial) sand, gravel and clay	23 - 47	Unknown
LTA Lower Tertiary Aquifer sand, gravel, clay and silt, minor coal	47 - 55	3501 - 13000
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone, shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.	55 - 255	3501 - 13000

There are no GMUs at this location

For further information about this report contact:
Department of Environment, Land, Water & Planning
Email: ground.water@delwp.vic.gov.au

For further information on groundwater licensing in this area contact:
Southern Rural Water Corporation
Phone: 1300 139 510
Email: srw@srw.com.au
Website: www.srw.com.au

Printed: 28 April 2022

Date Updated: 11 January 2019

How to read this report

Introduction

Groundwater is part of the water cycle. When rain or snow falls on land, some of it evaporates, some flows to streams and rivers, and some seeps into the soil. Some of the water in the soil is used by plants but some continues to move down through the soil and rock until all the pores and cracks are full of water. This is known as the water table and this water is called groundwater.

Groundwater is a finite resource that, like surface water, is allocated under the Water Act (1989). A Bore Construction Licence is required to drill for groundwater including for domestic and stock purposes. Taking and using groundwater for commercial or irrigation purposes requires an additional licence.

Purpose of this report

This report has been prepared to provide potential groundwater users with basic information about groundwater beneath their property. This includes the different geological layers, the depths of the layers and the salinity of groundwater in the layers. Information on the groundwater management units (GMU) and any associated caps on the volume that can be licensed (the PCV) are also provided.

Definitions and context

Term	Description
Groundwater Catchment	An identified area of the State within which groundwater resources are connected.
Easting / Northing	The VICGRID 94 coordinates of the spot that was selected on the interactive map.
Groundwater Salinity	Indicates the possible concentration of salts within the groundwater. The salt content indicates the possible uses of the water (see the Beneficial Use Table below). Fertilisers and other contaminants can also enter groundwater and affect its use. It is up to you to make sure that the groundwater you use is suitable for your purpose.
Aquifer	An aquifer is a layer of soil or rock which stores usable volumes of groundwater. Aquifers are generally limestones, gravels and sands, as well as some fractured rocks where the cracks in the rock are open and connected (some basalts, sandstones and limestones). How much water can be pumped from an aquifer depends on how much water is stored in pores and cracks, how well connected the pores and cracks are, and how thick the layer is. It is more likely that volumes of water for irrigation and urban water supply will come from gravels, sands, limestones and basalts that are at least 30 metres thick. Low volumes of water for domestic and stock use are likely from any aquifer greater than 10 metres thick. The advice above is a guide only, as the amount of water available can be highly variable. Actual pumping volumes can only be determined from drilling, appropriate construction and testing of a bore.
Aquitard	An aquitard is a layer of rock or soil that does not allow water to move through it easily, limiting its capacity to supply water. Aquitards are generally silts, clays and fractured rocks (where there are few cracks in the rock or the cracks are poorly connected).
Groundwater Management Unit (GMU)	A collective term for groundwater management areas (GMAs) and water supply protection areas (WSPAs). GMAs and WSPAs are defined areas and depths below the surface where rules for groundwater use may apply. WSPAs often have caps on groundwater use and plans describing how the resource is managed. GMAs usually have caps on groundwater use and may have local plans and rules. All other areas are managed directly through the Water Act (1989). Always check with your local Rural Water Corporation to be sure that the information on the GMU is correct for your specific location.
Permissible Consumptive Volume (PCV)	A cap that is set under the Water Act (1989) declaring the total volume of groundwater that may be taken from the area. Once the PCV is reached, no additional extraction can be licensed for use within the area unless traded from another groundwater licence holder.
Depth to Water Table	This is an indication of the depth at which groundwater might first be encountered when drilling a bore. The depth can vary from year to year, and from place to place and may vary significantly from that indicated in this report.

Beneficial Use Table

Salinity range (mg/L TDS)	Beneficial use as described by State Environment Protection Policy (Groundwaters of Victoria) s160							
	Potable water - preferred	Potable water - acceptable	Potable mineral water	Irrigation	Stock water	Industry	Ecosystem protection	Buildings and structures
<500	✓	✓	✓	✓	✓	✓	✓	✓
501-1000		✓	✓	✓	✓	✓	✓	✓
1001-3500			✓	✓	✓	✓	✓	✓
3501-13000					✓	✓	✓	✓
13001+						✓	✓	✓

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VICTORIA State Government | Environment, Land, Water and Planning

Groundwater Resource Report

Groundwater catchment: West Port Phillip Bay VICGRID94 Easting: 2455628 Northing: 2423285

Depth to water table: 20 - 50m Water table salinity (mg/L): 7001 - 13000

Groundwater layers (Aquifers and Aquitards)	Depth below surface (m)	Groundwater salinity (mg/L)
QA Quaternary Aquifer sand, gravels, clay, silts	0 - 21	Unknown
UTB Upper Tertiary / Quaternary Basalt basalt (fractured rock)	21 - 31	Unknown
LTA Lower Tertiary Aquifer sand, gravel, clay and silt, minor coal	31 - 67	3501 - 13000
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone, shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.	67 - 267	3501 - 13000

There are no GMUs at this location

For further information about this report contact:
Department of Environment, Land, Water & Planning
Email: ground.water@delwp.vic.gov.au

For further information on groundwater licensing in this area contact:
Southern Rural Water Corporation
Phone: 1300 139 510
Email: srw@srw.com.au
Website: www.srw.com.au

Printed: 28 April 2022
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How to read this report

Introduction

Groundwater is part of the water cycle. When rain or snow falls on land, some of it evaporates, some flows to streams and rivers, and some seeps into the soil. Some of the water in the soil is used by plants but some continues to move down through the soil and rock until all the pores and cracks are full of water. This is known as the water table and this water is called groundwater.

Groundwater is a finite resource that, like surface water, is allocated under the Water Act (1989). A Bore Construction Licence is required to drill for groundwater including for domestic and stock purposes. Taking and using groundwater for commercial or irrigation purposes requires an additional licence.

Purpose of this report

This report has been prepared to provide potential groundwater users with basic information about groundwater beneath their property. This includes the different geological layers, the depths of the layers and the salinity of groundwater in the layers. Information on the groundwater management units (GMU) and any associated caps on the volume that can be licensed (the PCV) are also provided.

Definitions and context

Term	Description
Groundwater Catchment	An identified area of the State within which groundwater resources are connected.
Easting / Northing	The VICGRID 94 coordinates of the spot that was selected on the interactive map.
Groundwater Salinity	Indicates the possible concentration of salts within the groundwater. The salt content indicates the possible uses of the water (see the Beneficial Use Table below). Fertilisers and other contaminants can also enter groundwater and affect its use. It is up to you to make sure that the groundwater you use is suitable for your purpose.
Aquifer	An aquifer is a layer of soil or rock which stores usable volumes of groundwater. Aquifers are generally limestones, gravels and sands, as well as some fractured rocks where the cracks in the rock are open and connected (some basalts, sandstones and limestones). How much water can be pumped from an aquifer depends on how much water is stored in pores and cracks, how well connected the pores and cracks are, and how thick the layer is. It is more likely that volumes of water for irrigation and urban water supply will come from gravels, sands, limestones and basalts that are at least 30 metres thick. Low volumes of water for domestic and stock use are likely from any aquifer greater than 10 metres thick. The advice above is a guide only, as the amount of water available can be highly variable. Actual pumping volumes can only be determined from drilling, appropriate construction and testing of a bore.
Aquitard	An aquitard is a layer of rock or soil that does not allow water to move through it easily, limiting its capacity to supply water. Aquitards are generally silts, clays and fractured rocks (where there are few cracks in the rock or the cracks are poorly connected).
Groundwater Management Unit (GMU)	A collective term for groundwater management areas (GMAs) and water supply protection areas (WSPAs). GMAs and WSPAs are defined areas and depths below the surface where rules for groundwater use may apply. WSPAs often have caps on groundwater use and plans describing how the resource is managed. GMAs usually have caps on groundwater use and may have local plans and rules. All other areas are managed directly through the Water Act (1989). Always check with your local Rural Water Corporation to be sure that the information on the GMU is correct for your specific location.
Permissible Consumptive Volume (PCV)	A cap that is set under the Water Act (1989) declaring the total volume of groundwater that may be taken from the area. Once the PCV is reached, no additional extraction can be licensed for use within the area unless traded from another groundwater licence holder.
Depth to Water Table	This is an indication of the depth at which groundwater might first be encountered when drilling a bore. The depth can vary from year to year, and from place to place and may vary significantly from that indicated in this report.

Beneficial Use Table

Salinity range (mg/L TDS)	Beneficial use as described by State Environment Protection Policy (Groundwaters of Victoria) s160							
	Potable water - preferred	Potable water - acceptable	Potable mineral water	Irrigation	Stock water	Industry	Ecosystem protection	Buildings and structures
<500	✓	✓	✓	✓	✓	✓	✓	✓
501-1000		✓	✓	✓	✓	✓	✓	✓
1001-3500			✓	✓	✓	✓	✓	✓
3501-13000					✓	✓	✓	✓
13001+						✓	✓	✓

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VICTORIA State Government | Environment, Land, Water and Planning

Groundwater Resource Report

Groundwater catchment: West Port Phillip Bay

VICGRID94 Easting: 2456385 Northing: 2423016

Depth to water table: 10 - 20m Water table salinity (mg/L): 7001 - 13000

Groundwater layers (Aquifers and Aquitards)	Depth below surface (m)	Groundwater salinity (mg/L)
QA Quaternary Aquifer sand, gravels, clay, silts	0 - 2	Unknown
UTB Upper Tertiary / Quaternary Basalt basalt (fractured rock)	2 - 36	3501 - 13000
UTAF Upper Tertiary Aquifer (fluvial) sand, gravel and clay	36 - 41	1001 - 3500
LTA Lower Tertiary Aquifer sand, gravel, clay and silt, minor coal	41 - 64	1001 - 3500
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone, shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.	64 - 264	3501 - 13000

There are no GMUs at this location

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Email: ground.water@delwp.vic.gov.au

For further information on groundwater licensing in this area contact:
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Phone: 1300 139 510
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How to read this report

Introduction

Groundwater is part of the water cycle. When rain or snow falls on land, some of it evaporates, some flows to streams and rivers, and some seeps into the soil. Some of the water in the soil is used by plants but some continues to move down through the soil and rock until all the pores and cracks are full of water. This is known as the water table and this water is called groundwater.

Groundwater is a finite resource that, like surface water, is allocated under the Water Act (1989). A Bore Construction Licence is required to drill for groundwater including for domestic and stock purposes. Taking and using groundwater for commercial or irrigation purposes requires an additional licence.

Purpose of this report

This report has been prepared to provide potential groundwater users with basic information about groundwater beneath their property. This includes the different geological layers, the depths of the layers and the salinity of groundwater in the layers. Information on the groundwater management units (GMU) and any associated caps on the volume that can be licensed (the PCV) are also provided.

Definitions and context

Term	Description
Groundwater Catchment	An identified area of the State within which groundwater resources are connected.
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Beneficial Use Table

Salinity range (mg/L TDS)	Beneficial use as described by State Environment Protection Policy (Groundwaters of Victoria) s160							
	Potable water - preferred	Potable water - acceptable	Potable mineral water	Irrigation	Stock water	Industry	Ecosystem protection	Buildings and structures
<500	✓	✓	✓	✓	✓	✓	✓	✓
501-1000		✓	✓	✓	✓	✓	✓	✓
1001-3500			✓	✓	✓	✓	✓	✓
3501-13000					✓	✓	✓	✓
13001+						✓	✓	✓

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Groundwater Resource Report

Groundwater catchment: West Port Phillip Bay VICGRID94 Easting: 2455348 Northing: 2423338

Depth to water table: 20 - 50m Water table salinity (mg/L): 7001 - 13000

Groundwater layers (Aquifers and Aquitards)	Depth below surface (m)	Groundwater salinity (mg/L)
QA Quaternary Aquifer sand, gravels, clay, silts	0 - 13	Unknown
LTA Lower Tertiary Aquifer sand, gravel, clay and silt, minor coal	13 - 61	3501 - 13000
BSE Mesozoic and Palaeozoic Bedrock (basement) sedimentary (fractured rock): Sandstone, siltstone, mudstone, shale. Igneous (fractured rock): includes volcanics, granites, granodiorites.	61 - 261	3501 - 13000

There are no GMUs at this location

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Beneficial Use Table

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	Potable water - preferred	Potable water - acceptable	Potable mineral water	Irrigation	Stock water	Industry	Ecosystem protection	Buildings and structures
<500	✓	✓	✓	✓	✓	✓	✓	✓
501-1000		✓	✓	✓	✓	✓	✓	✓
1001-3500			✓	✓	✓	✓	✓	✓
3501-13000					✓	✓	✓	✓
13001+						✓	✓	✓

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VICTORIA State Government | Environment, Land, Water and Planning

Appendix F – Borelogs

ENVIRONMENTAL BORE BH01

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	SA		FILL: CL - Sandy CLAY, grey-brown, medium grained sand. With silt, with rootlets, minor fine basalt crushed rock gravel, dry - moist, loose.	0.1	BH01 - 0.1	
0.1						
0.15						
0.2						
0.25						
0.3			NAT: Silty CLAY, high plasticity, red-brown, stiff-very stiff.			
0.35						
0.4						
0.45						
0.5				0.1	BH01 - 0.5	
0.55						
0.6			Becomes yellow brown.			
0.65						
0.7						
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1 mbgl. Target Depth Reached.	0.3	BH01 - 1.0	

ENVIRONMENTAL BORE BH02

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	SA		FILL: CL - Sandy CLAY, grey-brown, medium grained sand. With silt, with rootlets, minor fine basalt crushed rock gravel, dry - moist, loose.	0.1	BH02 - 0.1	
0.1						
0.15						
0.2						
0.25						
0.3			NAT: Silty CLAY, high plasticity, red-brown, stiff-very stiff.			
0.35						
0.4						
0.45						
0.5				0.1	BH02 - 0.5	
0.55						
0.6			Becomes yellow brown, with trace fine to medium calcareous gravels.			
0.65						
0.7						
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1 mbgl. Target Depth Reached.	0.1	BH02 - 1.0	

ENVIRONMENTAL BORE BH03

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	SA		FILL: CL - Sandy CLAY, grey-brown, medium grained sand. With silt, minor fine basalt crushed rock gravel, dry, loose.	0.1	BH03 - 0.1	
0.3			Clayey SILT - pale red - brown, dry, compacted.	0.1	BH03 - 0.5	
0.55			NAT: Silty CLAY, high plasticity, red-brown, hard, dry.			
1			Termination Depth at: 1 mbgl. Target Depth Reached.	0.0	BH03 - 1.0	

ENVIRONMENTAL BORE BH04

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	SA		FILL: Clayey SAND, red - brown, loose, dry, with fine gravel (basalt crushed rock).			
0.1				0.2	BH04 - 0.1	
0.15						
0.2						
0.25						
0.3			FILL: Gravelly CLAY, medium plasticity, yellow - brown, hard, dry, with sand and silt.			
0.35						
0.4						
0.45						
0.5				0.0	BH04 - 0.5	
0.55						
0.6			NAT: Silty CLAY, high plasticity, yellow - brown, hard, dry.			
0.65						
0.7						
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1 mbgl. Target Depth Reached.	0.1	BH04 - 1.0	

ENVIRONMENTAL BORE BH05

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	SA		FILL: Gravelly CLAY, red-brown, moist, loose, with minor fine basalt crushed rock gravel.	0.1	BH05 - 0.1	
0.1						
0.15						
0.2						
0.25						
0.3			NAT: Silty CLAY, high plasticity, yellow - brown, hard, dry.			
0.35						
0.4						
0.45						
0.5				0.1	BH05 - 0.5	
0.55						
0.6						
0.65						
0.7			Becoming more brown.			
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1 mbgl. Target Depth Reached.	0.1	BH05 - 1.0	

ENVIRONMENTAL BORE BH05

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	SA		FILL: Sandy CLAY, dark brown, moist, loose, with minor fine basalt crushed rock gravel. Less gravel below 0.1 mbgl.	0.3	BH06 - 0.1	
0.1						
0.15						
0.2						
0.25			NAT: CLAY, high plasticity, red - brown, hard.			
0.3						
0.35						
0.4						
0.45						
0.5			Becoming pale brown, with fine to medium grained gravel.	0.3	BH06 - 0.5	
0.55						
0.6						
0.65						
0.7						
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1 mbgl. Target Depth Reached.	1.0	BH06 - 1.0	

ENVIRONMENTAL BORE BH07

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	SA		FILL: Gravel, dry.	0.2	BH07 - 0.1 + FD - 01 + FS - 01	
0.1			FILL: Reworked CLAY, red - brown, hard.			
0.2			FILL: Reworked CLAY, pale brown, dry, with gravel.			
0.3						
0.4						
0.5				0.2	BH07 - 0.5	
0.6						
0.7						
0.8			NAT: Gravelly CLAY, high plasticity, brown, stiff, dry - moist, with gravel.			
0.9						
1			Silty CLAY - high plasticity, brown, stiff, dry - moist, with minor fine gravel.	0.2	BH07 - 1.0	
1.1						
1.2						
1.3						
1.4						
1.5			Termination Depth at: 1.5 mbgl. Target Depth Reached.	0.2	BH07 - 1.5	

Disclaimer This bore log is intended for environmental not geotechnical purposes.
produced by ESlog.ESdat.net on 10 Jun 2022

ENVIRONMENTAL BORE BH08

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG Custom 4WD
DRILLING METHOD Solid Auger
TOTAL DEPTH 1.0 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

SA = Solid Auger.

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	SA		FILL: Clayey SILT, brown, dry - moist, loose, with trace gravel, with rootlets.			
0.05					BH08 - 0.1 + Bag	
0.1			NAT: CLAY with silt, medium plasticity, red - brown and mottled white, firm.	0.2		
0.15						
0.2						
0.25						
0.3						
0.35						
0.4						
0.45						
0.5				0.5	BH08 - 0.5	
0.55						
0.6						
0.65						
0.7						
0.75						
0.8			Silty CLAY, brown, pale grey mottled, dry, hard, with minor gravel.			
0.85						
0.9						
0.95						
1					BH08 - 1.0	
			Termination Depth at: 1.5 mbgl. Target Depth Reached.	0.5		

ENVIRONMENTAL BORE BH09

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG N/A
DRILLING METHOD Hand Auger
TOTAL DEPTH 0.65 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

HA = Hand Auger

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0.05	HA		FILL: Silty CLAY, brown, dry, loose, with gravel.			
0.1				0.5	BH09 - 0.1	
0.15			NAT: CLAY with silt, red - brown with trace gravel.			
0.2						
0.25						
0.3						
0.35						
0.4				0.2		
0.45						
0.5					BH09 - 0.4	
0.55			CLAY with silt, brown, pale grey mottling, carbonaceous weathering.			
0.6				0.4		
0.65			Termination Depth at: 0.65 mbgl due to refusal.			

ENVIRONMENTAL BORE BH10

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG N/A
DRILLING METHOD Hand Auger
TOTAL DEPTH 0.65 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

HA = Hand Auger

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	HA		FILL: Silty CLAY, brown, dry, loose, with gravel.			
0.05						
0.1				0.2	BH10 - 0.1	
0.15			NAT: CLAY with silt, medium plasticity, red - brown, dry - moist, with trace gravel.			
0.2						
0.25						
0.3						
0.35						
0.4						
0.45						
0.5				0.3	BH10 - 0.5 + Bag	
0.55						
0.6						
0.65						
0.7						
0.75						
0.8			CLAY with silt, becoming brown, dry - moist, becoming softer, with gravel.			
0.85						
0.9						
0.95						
1				0.4	BH10 - 1.0	
			Termination Depth at: 1.0 mbgl. Target Depth Reached.			

ENVIRONMENTAL BORE BH11

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG N/A
DRILLING METHOD Hand Auger
TOTAL DEPTH 0.65 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

HA = Hand Auger

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	HA		FILL: Silty CLAY, brown, dry, loose, with gravel.			
0.05						
0.1				0.3	BH11 - 0.1	
0.15			NAT: CLAY with silt, medium plasticity, red - brown, dry - moist, with trace gravel.			
0.2						
0.25						
0.3						
0.35						
0.4						
0.45						
0.5				0.3	BH11 - 0.5	
0.55						
0.6						
0.65						
0.7						
0.75						
0.8			CLAY with silt, becoming brown, dry - moist, becoming softer, with gravel.			
0.85						
0.9						
0.95						
1				0.4	BH11 - 1.0	
			Termination Depth at: 1.0 mbgl. Target Depth Reached.			

ENVIRONMENTAL BORE BH12

PROJECT NUMBER 20220134
PROJECT NAME Hopetoun Park Preliminary Site
CLIENT Bacchus Marsh Property Group
ADDRESS 124 Hopetoun Park Rd
DRILLING DATE 09/06/2022

DRILLING COMPANY Horizon Drilling
DRILLING RIG N/A
DRILLING METHOD Hand Auger
TOTAL DEPTH 0.65 mbgl
DIAMETER 100 mm

LOGGED BY ED
CHECKED BY GM

HA = Hand Auger

Depth (m)	Drilling Method	Graphic Log	Material Description	PID	Samples	Additional Observations
0	HA		FILL: Gravel with silt, brown - grey, dry.			
0.05						
0.1				0.23	BH12 - 0.1	
0.15			NAT: CLAY with silt, red - brown, dry - moist, crumbly, with gravel.			
0.2						
0.25						
0.3						
0.35						
0.4						
0.45						
0.5			CLAY with silt, medium plasticity, red - brown, dry - moist, with trace gravel.	0.3	BH12 - 0.5	
0.55						
0.6						
0.65						
0.7						
0.75						
0.8						
0.85						
0.9						
0.95						
1			Termination Depth at: 1.0 mbgl. Target Depth Reached.	0.4	BH12 - 1.0	

Appendix G – Calibration Certificates

Equipment Calibration Form
MiniRAE 3000 PID

Enqip #: 16846

Company: Edge Group Pty Ltd

Consultant: Natasha Dun

PO #: 20220134

Certificate #: 24980

INSTRUMENT IDENTIFICATION

Model Number: PGM 7320

Serial Number: 592-908396

INSPECTION RECORD

Flow Rate: PASS

Buzzer: PASS

Date & Time: PASS

CALIBRATION DETAILS

Parameters	Standard	Result
Air	0.0 ppm	0.0 ppm
Isobutylene	100.0 ppm	100.0 ppm

Alarm Limits: **High** 100 **Low** 50

Calibration Successful: YES

Calibrated By: Owen Hvalica **Test Date:** 8/06/2022

enqip
116 Thistlethwaite St, South Melbourne 3205
P 1300 218 987
E info@enqip.com.au | W www.enqip.com.au

Appendix H – Site Photos

	1. Glass on the former trotting track at 124 Hopetoun Park Road
	2. Waste material stored at 124 Hopetoun Park Road

	3. Shed at 124 Hopetoun Park Road
	4. Gravel stockpile at 30 Kyle Lane
	5. Photo of gravel stockpile removed (as provided by the client)

	6. Waste at 249 Hopetoun Park Road.
	7. Collection of stockpiles at 249 Hopetoun Park Road.

	8. Anthropogenic materials in the stockpiles at 249 Hopetoun Park Road.
	9. Waste at 249 Hopetoun Park Road.

	10. Waste at 249 Hopetoun Park Road.
	11. Waste at 249 Hopetoun Park Road.

	12. Pit in shed of 249 Hopetoun Park Road

Appendix I – Laboratory Chain of Custody and Reports

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: EDGE GROUP
ADDRESS / OFFICE: 423 CITY RD SOUTH MELBOURNE
PROJECT MANAGER (PM): Natasha Dun
PROJECT ID: 20220134
SITE: Hopetoun Park P.O. NO.:
RESULTS REQUIRED (Date): QUOTE NO.: MEBQ 108 - 20

SAMPLER: GM ED
MOBILE: 0409 106 107
PHONE
EMAIL REPORT TO: natasha.dun@edgegroup.net.au; garry.masur@edgegroup.net.au
EMAIL INVOICE TO: accounts@edgegroup.net.au

Australian Laboratory Services Pty Ltd
2-4 Westall Road, Springvale, VIC 3171

FOR LABORATORY USE ONLY
Custody seal intact (if applicable) Yes No N/A
SAMPLE TEMPERATURE
CHILLED Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes: e.g. Highly contaminated samples e.g. "High PAHs expected". Extra volume for QC or trace LORs etc.

Environmental Division Melbourne
Work Order Reference
EM2211061

Telephone : + 61-3-8549 9600

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION		P21/2 NEPM HIL A Screen with herbicides	P22 NEPM EIL Site Classification	EPA 1828.2 Screen	S-26 + S-12 8 metals TRH BTEXN PAH OPP OCP	S-27 TRH (C6-C40) / BTEXN / PAH / Phenols / 8 metals	S-5 8 metals TRH BTEXN	S26 TRH (C6-C40) / BTEXN / PAH / 8 Metals	S3 15 metals	TRH BTEXN				HOLD
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles													
1	BH01-0.1	s	9/6/2022			1	X												
2	BH01-0.5	s	9/6/2022			1								X					
3	BH01-1.0	s	9/6/2022			1													
4	BH02-0.1	s	9/6/2022			1							X						
5	BH02-0.5	s	9/6/2022			1													
6	BH02-1.0	s	9/6/2022			1													
7	BH03-0.1	s	9/6/2022			1							X						
8	BH03-0.5	s	9/6/2022			1								X					
9	BH03-1.0	s	9/6/2022			1													
10	BH04-0.1	s	9/6/2022			1							X						
11	BH04-0.5	s	9/6/2022			1													
12	BH04-1.0	s	9/6/2022			1													
13	BH05-0.1	s	9/6/2022			1							X						
14	BH05-0.5	s	9/6/2022			1								X					
15	BH05-1.0	s	9/6/2022			1													
16	BH06-0.1	s	9/6/2022			1							X						
17	BH06-0.5	s	9/6/2022			1													
18	BH06-1.0	s	9/6/2022			1													
19	BH07-0.1	s	9/6/2022			3	X	X											
NR	BH07-0.4	s	9/6/2022			1				X									
NR	BH07-0.6	s	9/6/2022			1													

Received: 10/6, 8:35 Carrier: courier
C/note:
Temp: 6.1 °C Seal: Y N
Ice / Icebricks / NA

TK

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date: 9/6/22	Name:	Date:	Con' Note No:
Of:	Time: 6:30pm	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd
2-4 Westall Road, Springvale, VIC 3171

CLIENT: EDGE GROUP	SAMPLER: GM ED
ADDRESS / OFFICE: 423 CITY RD SOUTH MELBOURNE	MOBILE: 0409 106 107
PROJECT MANAGER (PM): Natasha Dun	PHONE
PROJECT ID: 20220134	EMAIL REPORT TO: natasha.dun@edgegroup.net.au; garry.masur@edgegroup.net.au
SITE: Hopetoun Park P.O. NO.:	EMAIL INVOICE TO: accounts@edgegroup.net.au
RESULTS REQUIRED (Date): QUOTE NO.: MEBQ 108 - 20	ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

FOR LABORATORY USE ONLY
CUSTODY SEAL (where applicable)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

SAMPLE INFORMATION (note: S = Soil, W=Water) | CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	P21/2 NEPM HIL A Screen with herbicides	P22 NEPM EIL Site Classification	EPA 1828.2 Screen	S-26 + S-12 8 metals TRH BTEXN PAH OPP OCP	S-27 TRH (C6-C40) / BTEXN / PAH / Phenols / 8 metals	S-5 8 metals TRH BTEXN	S26 TRH (C6-C40) / BTEXN / PAH / 8 Metals	S3 15 metals	TRH BTEXN				HOLD
20	SP01	s	9/6/2022			1			x										
21	SP02	s	9/6/2022			1													
22	SP03	s	9/6/2022			1								x					
23	SP04	s	9/6/2022			1													
24	SP05	s	9/6/2022			1							x						
25	SP06	s	9/6/2022			1													
26	SP07	s	9/6/2022			1								x					
27	SP08	s	9/6/2022			1													
28	SP09	s	9/6/2022			1							x						
29	SP10	s	9/6/2022			1													

Notes: e.g. Highly contaminated samples
e.g. "High PAHs expected".
Extra volume for QC or trace LORs etc.

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date: 9/6/22	Name:	Date:	Con' Note No:
Of:	Time: 6:00pm	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: EDGE GROUP
ADDRESS / OFFICE: 423 CITY RD SOUTH MELBOURNE
PROJECT MANAGER (PM): Natasha Dun
PROJECT ID: 20220134
SITE: Hopetoun Park P.O. NO.:
RESULTS REQUIRED (Date): QUOTE NO.: MEBQ 108 - 20

SAMPLER: GM ED
MOBILE: 0409 106 107
PHONE
EMAIL REPORT TO: natasha.dun@edgegroup.net.au; garry.masur@edgegroup.net.au
EMAIL INVOICE TO: accounts@edgegroup.net.au

Australian Laboratory Services Pty Ltd
2-4 Westall Road, Springvale, VIC 3171

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

Notes: e.g. Highly contaminated samples
e.g. "High PAHs expected".
Extra volume for QC or trace LORs etc.

SAMPLE INFORMATION (note: S = Soil, W=Water) | CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	P21/2 NEPM HIL A Screen with herbicides	P22 NEPM EIL Site Classification	EPA 1828.2 Screen	S-26 + S-12 8 metals TRH BTEXN PAH OPP OCP	Phenols	S-5 8 metals TRH BTEXN	S26 TRH (C6-C40) / BTEXN / PAH / 8 Metals	S3 15 metals	TRH BTEXN			HOLD
30	BH08-0.1	s	9/6/2022			2				X								
31	BH08-0.5	s	9/6/2022			2		X				X						
32	BH08-1.0	s	9/6/2022			1												
33	BH09-0.1	s	9/6/2022			2	X											
34	BH09-0.5	s	9/6/2022			1						X						
35	BH09-1.0	s	9/6/2022			1												
36	BH10-0.1	s	9/6/2022			2				x								
37	BH10-0.5	s	9/6/2022			1						X						
38	BH10-1.0	s	9/6/2022			1												
39	BH11-0.1	s	9/6/2022			2	X											
40	BH11-0.5	s	9/6/2022			1						x						
41	BH1-1.0	s	9/6/2022			1												
42	BH12-0.1	s	9/6/2022			2					x	x						
43	BH12-0.5	s	9/6/2022			1						x						
44	BH12-1.0	s	9/6/2022			1												
45	FDO1	s	9/6/2022			1								X				
	— FS01 —	s	9/6/2022			1								X				
46	RINS01	s	9/6/2022			1								X				
47	TRIP01	s	9/6/2022			1									X			

Send to Enviclab for analysis please!! (FS01)

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date: 9/6/22	Name:	Date:	Con' Note No:
Of:	Time: 6:00pm	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserveed Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

48. BH07-0.8 S 9/6/22 } Extra Sample
49. BH07-1.0 S 9/6/22

AUSTRALIAN LABORATORY SERVICES P/L

Natasha Dun

From: Natasha Dun
Sent: Thursday, 16 June 2022 2:53 PM
To: Hannah White
Cc: Garry Masur; Ella Denton; Camila Amazonas
Subject: RE: EM2211061 - EDGE GROUP - PROJECT 20220134

Hi Hannah,

Can we please get the following amendments to the COC:

- BH08-0.5 and BH09-0.5 to be analysed for S-27 instead of S-5 (so analysing for Phenols and PAHs in addition)
- BH01-0.5 to be taken off hold and analysed for S3 (15 Metals)
- SP07 to be analysed for S26 instead of S3 (so analysing for TRH, BTEXN and PAH in addition).

Sorry for the late request. Please let me know how delayed we should be expecting this report.

Kind regards,

Natasha Dun
Environmental Consultant
Edge Group Pty Ltd
423 City Road
South Melbourne, Victoria 3205
Phone (03) 8625 9696
Mobile 0424 225 324
natasha.dun@edgegroup.net.au
www.edgegroup.net.au

From: Natasha Dun
Sent: Thursday, 16 June 2022 10:54 AM
To: Hannah White <hannah.white@ALSGlobal.com>
Cc: Garry Masur <garry.masur@edgegroup.net.au>; Ella Denton <ella.denton@edgegroup.net.au>; Camila Amazonas <Camila.amazonas@edgegroup.net.au>
Subject: RE: EM2211061 - EDGE GROUP - PROJECT 20220134

Hi Hannah,

Thanks for bringing this to my attention.

Can you please make the following actions:

- BH07-0.4, BH07-0.6 and BH09-1.0 were not taken. Please remove/ignore these.
- The jar you called BH07-0.8 is actually BH07-0.5 (apologies for messy handwriting). Please consider this sample for the S-26 analysis request (instead of the missing BH07-0.4).
- The jar you called BH09-9.6 is actually BH09-0.5 (again, apologies for messy handwriting). Please consider this sample for the S-5 analysis request (as sample #034).
- BH07-1.0 and BH07-1.5 were accidentally excluded from the COC. Thankyou for logging these as additional samples, please continue to leave them on hold.
- BH09-0.6 was also a sample that was accidentally excluded from the COC. This sample is the “third BH09/0.1” sample jar. This is the third sample from the left of your first photo, which the “0.6” resembles a “0.U”. Can you please add this to the COC and put this on hold.

Regarding the insufficient sample from Sample #031 for the clay content parameter:

- Can you please make a composite sample combining Sample #031 with Sample #040 (BH11-0.5) and Sample #043 (BH12-0.5) to assess the clay content parameter?

My apologies for the confusion. Let me know if there is anything else I can assist with.

Kind regards,

Natasha Dun
Environmental Consultant
Edge Group Pty Ltd
423 City Road
South Melbourne, Victoria 3205
Phone (03) 8625 9696
Mobile 0424 225 324
natasha.dun@edgegroup.net.au
www.edgegroup.net.au

From: Hannah White <hannah.white@ALSGlobal.com>
Sent: Wednesday, 15 June 2022 5:21 PM
To: Natasha Dun <Natasha.Dun@edgegroup.net.au>
Subject: EM2211061 - EDGE GROUP - PROJECT 20220134

Hi Natasha,

Please note, for the attached work order:

- We did not receive samples BH07-0.4, BH07-0.6, BH09-0.5 and BH09-1.0
- As no bag was received for sample #031 we have logged this sample for the requested P-22 analysis, without the clay content parameter.

- We did receive additional samples BH07-0.8, BH07-1.0, BH07-1.5 and BH09-9.6. Please see below for photos. These samples have been logged as additional samples to the batch and placed on hold pending further instruction. Please let us know at your earliest convenience if any analysis is required on the below.
- We also received an extra jar for sample BH09/0.1, also included in the photos below.

Thank you

Regards,

Hannah White
Client Services Officer – Environmental, Melbourne
ALS Limited

O: +61 3 8549 9600
D: +61 3 8549 9608
hannah.white@alsglobal.com

2-4 Westall Road, Springvale VIC 3171

alsglobal.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2211061**	Page	: 1 of 37
Client	: **EDGE GROUP PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: NATASHA DUN	Contact	: Hannah White
Address	: 423 City Rd South Melbourne	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20220134	Date Samples Received	: 10-Jun-2022 13:25
Order number	: ----	Date Analysis Commenced	: 14-Jun-2022
C-O-C number	: ----	Issue Date	: 24-Jun-2022 12:22
Sampler	: GM and ED		
Site	: Hopetoun Park		
Quote number	: MEBQ/108/21 Primary Work		
No. of samples received	: 49		
No. of samples analysed	: 27		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Aleksandar Vujkovic	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP202: Poor matrix spike recoveries for Picloram and Clopyralid due to matrix effects.
- EP202: Particular samples required dilution due to matrix interferences. LOR values have been adjusted accordingly.
- EG020-T: Metals for EM2211061 #46 has been confirmed by re-preparation and re-analysis.
- ALS is not NATA accredited for the analysis of Exchangeable Cations on Alkaline Soils when performed under ALS Method ED006.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EG005-T : EM2211035 #1 Poor duplicate precision for total Lead due to sample matrix. Confirmed by re-digestion and re-analysis.
- EG005-T : EM2211035#13 Poor duplicate precision for total Zinc due to sample matrix. Confirmed by re-digestion and re-analysis.
- EG005-T : EM2211061#14 results for total Manganese have been confirmed by re-digestion and re-analysis. It's been noticed that repeated result were greatly vary. Repeated Manganese were: 47 mg/kg, 89 mg/kg, 157 mg/kg, and 124 mg/kg.
- EG005-T : EM2211525 #10 Poor duplicate precision for total Manganese due to sample matrix. Confirmed by re-digestion and re-analysis.
- EP075(SIM): EM2211061_033 required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.
- EP075-EM: EM2211035_001 Poor duplicate precision due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP075-EM: EM221035_012 Poor matrix spike recovery due to matrix effects.
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.8	24.2	5.1	6.2	5.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	9	<5	<5	<5
Barium	7440-39-3	10	mg/kg	60	110	----	----	10
Beryllium	7440-41-7	1	mg/kg	1	2	----	----	<1
Boron	7440-42-8	50	mg/kg	<50	<50	----	----	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	23	40	13	9	8
Cobalt	7440-48-4	2	mg/kg	18	14	----	----	<2
Copper	7440-50-8	5	mg/kg	25	14	15	14	<5
Lead	7439-92-1	5	mg/kg	5	13	<5	<5	<5
Manganese	7439-96-5	5	mg/kg	450	177	----	----	26
Nickel	7440-02-0	2	mg/kg	52	38	37	39	2
Selenium	7782-49-2	5	mg/kg	<5	<5	----	----	<5
Vanadium	7440-62-2	5	mg/kg	34	54	----	----	20
Zinc	7440-66-6	5	mg/kg	44	22	34	27	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	----	----	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
Mirex	2385-85-5	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		<0.05	----	----	----	----
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		<0.05	----	----	----	----
EP069: Toxaphene									
Toxaphene	8001-35-2	2	mg/kg		<2	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	**0.6**	**0.6**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	**1.2**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	----	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	----	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	<10	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	----	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	----	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	<50	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	----	<0.2	<0.2	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg		<1	----	<1	<1	----
EP202A: Phenoxyacetic Acid Herbicides by LCMS									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
					Result	Result	Result	Result	Result
EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued									
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg		<0.02	----	----	----	----
2.4-DB	94-82-6	0.02	mg/kg		<0.02	----	----	----	----
Dicamba	1918-00-9	0.02	mg/kg		<0.02	----	----	----	----
Mecoprop	93-65-2	0.02	mg/kg		<0.02	----	----	----	----
MCPA	94-74-6	0.02	mg/kg		<0.02	----	----	----	----
2.4-DP	120-36-5	0.02	mg/kg		<0.02	----	----	----	----
2.4-D	94-75-7	0.02	mg/kg		<0.02	----	----	----	----
Triclopyr	55335-06-3	0.02	mg/kg		<0.02	----	----	----	----
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg		<0.02	----	----	----	----
2.4.5-T	93-76-5	0.02	mg/kg		<0.02	----	----	----	----
MCPB	94-81-5	0.02	mg/kg		<0.02	----	----	----	----
Picloram	1918-02-1	0.02	mg/kg		<0.02	----	----	----	----
Clopyralid	1702-17-6	0.02	mg/kg		<0.02	----	----	----	----
Fluroxypyr	69377-81-7	0.02	mg/kg		<0.02	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**105**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**108**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**62.9**	----	----	----	----
EP069: Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**103**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**86.0**	----	**82.5**	**84.7**	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**86.8**	----	**84.3**	**86.7**	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**68.4**	----	**66.1**	**66.2**	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**95.3**	----	**93.0**	**95.2**	----
Anthracene-d10	1719-06-8	0.5	%		**92.6**	----	**90.0**	**92.8**	----
4-Terphenyl-d14	1718-51-0	0.5	%		**92.1**	----	**89.6**	**92.2**	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**90.4**	----	**80.8**	**88.2**	----
Toluene-D8	2037-26-5	0.2	%		**92.6**	----	**75.0**	**97.3**	----
4-Bromofluorobenzene	460-00-4	0.2	%		**98.0**	----	**88.3**	**97.0**	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01 - 0.1	BH01 - 0.5	BH02 - 0.1	BH03 - 0.1	BH03 - 0.5
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-001	EM2211061-002	EM2211061-004	EM2211061-007	EM2211061-008
					Result	Result	Result	Result	Result
EP202S: Phenoxyacetic Acid Herbicide Surrogate									
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%		**72.7**	**----**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	----	----	----	----	8.2
EA002-AD: pH (Soils) dried at 40°C								
pH Value	----	0.1	pH Unit	----	----	----	----	9.0
EA010-AD: Conductivity (Soils) dried at 40°C								
Electrical Conductivity @ 25°C	----	1	µS/cm	----	----	----	----	615
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	14.3	18.8	18.1	7.8	10.9
EA150: Soil Classification based on Particle Size								
Clay (<2 µm)	----	1	%	----	----	----	----	17
EA152: Soil Particle Density								
Soil Particle Density (Clay/Silt/Sand)	----	0.01	g/cm3	----	----	----	----	2.69
ED006: Exchangeable Cations on Alkaline Soils								
ø Exchangeable Calcium	----	0.2	meq/100g	----	----	----	----	4.7
ø Exchangeable Magnesium	----	0.2	meq/100g	----	----	----	----	4.4
ø Exchangeable Potassium	----	0.2	meq/100g	----	----	----	----	1.0
ø Exchangeable Sodium	----	0.2	meq/100g	----	----	----	----	2.2
ø Cation Exchange Capacity	----	0.2	meq/100g	----	----	----	----	12.4
ø Exchangeable Calcium Percent	----	0.2	%	----	----	----	----	38.0
ø Exchangeable Magnesium Percent	----	0.2	%	----	----	----	----	35.7
ø Exchangeable Potassium Percent	----	0.2	%	----	----	----	----	8.1
ø Exchangeable Sodium Percent	----	0.2	%	----	----	----	----	18.2
ø Calcium/Magnesium Ratio	----	0.2	-	----	----	----	----	1.1
ø Magnesium/Potassium Ratio	----	0.2	-	----	----	----	----	4.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	<5	<5
Barium	7440-39-3	10	mg/kg	----	----	40	----	110
Beryllium	7440-41-7	1	mg/kg	----	----	<1	----	<1
Boron	7440-42-8	50	mg/kg	----	----	<50	----	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	16	19	42	14	17
Cobalt	7440-48-4	2	mg/kg	----	----	15	----	19
Copper	7440-50-8	5	mg/kg	9	10	8	20	19
Iron	7439-89-6	0.005	%	----	----	----	----	2.58
Lead	7439-92-1	5	mg/kg	6	6	8	15	8

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
					EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
					Result	Result	Result	Result	Result
EG005(ED093)T: Total Metals by ICP-AES - Continued									
Manganese	7439-96-5	5	mg/kg		----	----	**89**	----	**691**
Nickel	7440-02-0	2	mg/kg		**18**	**26**	**29**	**34**	**79**
Selenium	7782-49-2	5	mg/kg		----	----	<5	----	<5
Vanadium	7440-62-2	5	mg/kg		----	----	**64**	----	**16**
Zinc	7440-66-6	5	mg/kg		**16**	**18**	**9**	**52**	**52**
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	0.5	mg/kg		----	----	----	----	<0.5
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser									
Weak Acid Dissociable Cyanide	----	1	mg/kg		----	----	----	----	<1
EP004: Organic Matter									
Organic Matter	----	0.5	%		----	----	----	----	**1.0**
Total Organic Carbon	----	0.5	%		----	----	----	----	**0.6**
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		----	----	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		----	----	----	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		----	----	----	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg		----	----	----	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		----	----	----	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg		----	----	----	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg		----	----	----	----	<0.05
Aldrin	309-00-2	0.05	mg/kg		----	----	----	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		----	----	----	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		----	----	----	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		----	----	----	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		----	----	----	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg		----	----	----	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		----	----	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg		----	----	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	----	----	----	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		----	----	----	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		----	----	----	----	<0.05

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
					EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	----	----	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	----	----	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		----	----	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		----	----	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		----	----	----	----	<0.2
Mirex	2385-85-5	0.05	mg/kg		----	----	----	----	<0.05
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	----	----	----	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		----	----	----	----	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		----	----	----	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		----	----	----	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		----	----	----	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg		----	----	----	----	<0.05
Diazinon	333-41-5	0.05	mg/kg		----	----	----	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		----	----	----	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		----	----	----	----	<0.2
Malathion	121-75-5	0.05	mg/kg		----	----	----	----	<0.05
Fenthion	55-38-9	0.05	mg/kg		----	----	----	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		----	----	----	----	<0.05
Parathion	56-38-2	0.2	mg/kg		----	----	----	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		----	----	----	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		----	----	----	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		----	----	----	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		----	----	----	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		----	----	----	----	<0.05
Ethion	563-12-2	0.05	mg/kg		----	----	----	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		----	----	----	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		----	----	----	----	<0.05
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		----	----	----	----	<0.05
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		----	----	----	----	<0.05
EP069: Toxaphene									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
				Result	Result	Result	Result	Result
EP069: Toxaphene - Continued								
Toxaphene	8001-35-2	2	mg/kg	----	----	----	----	<2
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	----	----	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	----	----	----	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	----	----	----	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	----	----	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	----	----	----	----	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	----	----	----	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	----	----	----	----	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	----	----	----	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	----	----	----	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	----	----	----	----	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	----	----	----	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	----	----	----	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	**0.6**	**0.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg	**1.2**	**1.2**	----	**1.2**	**1.2**
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg	<50	<50	----	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg	<10	<10	----	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg	<50	<50	----	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg	<50	<50	----	<50	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg	<0.2	<0.2	----	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg	<0.5	<0.5	----	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	<1	<1
EP202A: Phenoxyacetic Acid Herbicides by LCMS								
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	----	----	----	----	<0.02
2.4-DB	94-82-6	0.02	mg/kg	----	----	----	----	<0.02
Dicamba	1918-00-9	0.02	mg/kg	----	----	----	----	<0.02
Mecoprop	93-65-2	0.02	mg/kg	----	----	----	----	<0.02
MCPA	94-74-6	0.02	mg/kg	----	----	----	----	<0.02
2.4-DP	120-36-5	0.02	mg/kg	----	----	----	----	<0.02
2.4-D	94-75-7	0.02	mg/kg	----	----	----	----	<0.02

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH04 - 0.1	BH05 - 0.1	BH05 - 0.5	BH06 - 0.1	BH07 - 0.1
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-010	EM2211061-013	EM2211061-014	EM2211061-016	EM2211061-019
				Result	Result	Result	Result	Result
EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued								
Triclopyr	55335-06-3	0.02	mg/kg	----	----	----	----	<0.02
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	----	----	----	----	<0.02
2.4.5-T	93-76-5	0.02	mg/kg	----	----	----	----	<0.02
MCPB	94-81-5	0.02	mg/kg	----	----	----	----	<0.02
Picloram	1918-02-1	0.02	mg/kg	----	----	----	----	<0.02
Clopyralid	1702-17-6	0.02	mg/kg	----	----	----	----	<0.02
Fluroxypyr	69377-81-7	0.02	mg/kg	----	----	----	----	<0.02
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	----	----	97.4
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	----	----	----	----	97.9
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	----	----	----	----	62.4
EP069: Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	----	----	94.2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	85.6	78.1	----	82.0	84.2
2-Chlorophenol-D4	93951-73-6	0.5	%	87.1	79.8	----	81.7	85.2
2.4.6-Tribromophenol	118-79-6	0.5	%	64.6	63.9	----	64.9	69.0
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	94.8	90.0	----	91.2	92.8
Anthracene-d10	1719-06-8	0.5	%	91.4	87.0	----	88.7	90.3
4-Terphenyl-d14	1718-51-0	0.5	%	90.9	87.7	----	88.0	90.5
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	85.1	77.7	----	84.3	90.0
Toluene-D8	2037-26-5	0.2	%	91.5	82.1	----	86.9	99.8
4-Bromofluorobenzene	460-00-4	0.2	%	95.0	84.1	----	91.9	99.8
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	----	----	----	----	83.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SP01	SP03	SP05	SP07	SP09
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	7.5	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.4	7.3	15.8	5.7	5.5
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	7	5	6
Barium	7440-39-3	10	mg/kg	----	80	----	----	----
Beryllium	7440-41-7	1	mg/kg	----	<1	----	----	----
Boron	7440-42-8	50	mg/kg	----	<50	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	----	31	52	28	31
Cobalt	7440-48-4	2	mg/kg	----	12	----	----	----
Copper	7440-50-8	5	mg/kg	14	12	20	11	13
Lead	7439-92-1	5	mg/kg	13	13	14	13	12
Manganese	7439-96-5	5	mg/kg	----	256	----	----	----
Molybdenum	7439-98-7	2	mg/kg	<2	----	----	----	----
Nickel	7440-02-0	2	mg/kg	33	27	51	24	28
Selenium	7782-49-2	5	mg/kg	<5	<5	----	----	----
Silver	7440-22-4	2	mg/kg	<2	----	----	----	----
Tin	7440-31-5	5	mg/kg	<5	----	----	----	----
Vanadium	7440-62-2	5	mg/kg	----	34	----	----	----
Zinc	7440-66-6	5	mg/kg	36	36	33	31	36
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	1	mg/kg	<1	----	----	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	40	mg/kg	180	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SP01	SP03	SP05	SP07	SP09
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.2	mg/kg	<0.2	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	----	----	----	----
1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	----	----	----	----
Methylene chloride	75-09-2	0.4	mg/kg	<0.4	----	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	----	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	----	----	----	----
Chloroform	67-66-3	0.02	mg/kg	<0.02	----	----	----	----
1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	----	----	----	----
Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	----	----	----	----
1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	----	----	----	----
Trichloroethene	79-01-6	0.02	mg/kg	<0.02	----	----	----	----
1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	----	----	----	----
Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	----	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	----	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	----	----	----	----
Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	----	----	----	----
Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	----	----	----	----
1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	----	----	----	----
1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	----	----	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.01	mg/kg	<0.01	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SP01	SP03	SP05	SP07	SP09
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	----	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	----	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	----	**1.2**	**1.2**	**1.2**
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	----	----	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	----	----	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	----	----	----	----
Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	----	----	----	----
^ Sum of Phenols (halogenated)	----	0.03	mg/kg	<0.03	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	----	----	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	----	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	----	----	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SP01	SP03	SP05	SP07	SP09
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Non-halogenated) - Continued								
2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	----	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	----	----	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	----	----	----	----
Dinoseb	88-85-7	5	mg/kg	<5	----	----	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	----	----	----	----
^ Sum of Phenols (non-halogenated)	----	1	mg/kg	<1	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	----	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.03	mg/kg	<0.03	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	----	----	----	----
beta-BHC	319-85-7	0.03	mg/kg	<0.03	----	----	----	----
gamma-BHC	58-89-9	0.03	mg/kg	<0.03	----	----	----	----
delta-BHC	319-86-8	0.03	mg/kg	<0.03	----	----	----	----
Heptachlor	76-44-8	0.03	mg/kg	<0.03	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SP01	SP03	SP05	SP07	SP09
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
					Result	Result	Result	Result	Result
EP075l: Organochlorine Pesticides - Continued									
Aldrin	309-00-2	0.03	mg/kg		<0.03	----	----	----	----
Heptachlor epoxide	1024-57-3	0.03	mg/kg		<0.03	----	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	----	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	----	----	----	----
Endosulfan 1	959-98-8	0.03	mg/kg		<0.03	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Dieldrin	60-57-1	0.03	mg/kg		<0.03	----	----	----	----
Endrin aldehyde	7421-93-4	0.03	mg/kg		<0.03	----	----	----	----
Endrin	72-20-8	0.03	mg/kg		<0.03	----	----	----	----
Endosulfan 2	33213-65-9	0.03	mg/kg		<0.03	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.03	mg/kg		<0.03	----	----	----	----
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.03	mg/kg		<0.03	----	----	----	----
^ **Sum of organochlorine pesticides**	----	0.03	mg/kg		<0.03	----	----	----	----
^ **Chlordane**	57-74-9	0.03	mg/kg		<0.03	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	----	<10	<10	<10
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		----	----	<50	<50	<50
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		----	----	<100	<100	<100
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		----	----	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		----	----	<50	<50	<50
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	----	<10	<10	<10
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		----	----	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		----	----	<50	<50	<50
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		----	----	<100	<100	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SP01	SP03	SP05	SP07	SP09
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C16 - C34 Fraction	----	100	mg/kg		<100	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		----	----	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		----	----	<50	<50	<50
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		----	----	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	----	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		----	----	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	----	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	----	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	----	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	----	<0.5	<0.5	<0.5
^ **Sum of BTEX**	----	0.2	mg/kg		----	----	<0.2	<0.2	<0.2
^ **Total Xylenes**	----	0.5	mg/kg		----	----	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		----	----	<1	<1	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**88.8**	----	----	----	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**81.1**	----	----	----	----
Toluene-D8	2037-26-5	0.1	%		**83.8**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**91.9**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	----	**87.2**	**85.4**	**83.3**
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	**86.8**	**81.4**	**85.8**
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	**65.4**	**80.1**	**67.4**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	**95.5**	**87.9**	**94.9**
Anthracene-d10	1719-06-8	0.5	%		----	----	**93.3**	**91.2**	**92.7**
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	**92.5**	**88.8**	**93.2**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SP01	SP03	SP05	SP07	SP09
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-020	EM2211061-022	EM2211061-024	EM2211061-026	EM2211061-028
					Result	Result	Result	Result	Result
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**98.7**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**90.2**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**92.2**	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**93.1**	----	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**86.3**	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%		**96.1**	----	----	----	----
Anthracene-d10	1719-06-8	0.025	%		**96.7**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%		**88.7**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		----	----	**90.4**	**83.6**	**92.3**
Toluene-D8	2037-26-5	0.2	%		----	----	**97.1**	**72.5**	**94.7**
4-Bromofluorobenzene	460-00-4	0.2	%		----	----	**98.0**	**74.2**	**97.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	----	8.4	----	----	----
EA002-AD: pH (Soils) dried at 40°C								
pH Value	----	0.1	pH Unit	----	9.3	----	----	----
EA010-AD: Conductivity (Soils) dried at 40°C								
Electrical Conductivity @ 25°C	----	1	µS/cm	----	1560	----	----	----
EA055: Moisture Content								
Moisture Content	----	1.0	%	----	----	----	----	20.8
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.2	13.9	2.6	3.2	----
ED006: Exchangeable Cations on Alkaline Soils								
ø Exchangeable Calcium	----	0.2	meq/100g	----	3.9	----	----	----
ø Exchangeable Magnesium	----	0.2	meq/100g	----	13.4	----	----	----
ø Exchangeable Potassium	----	0.2	meq/100g	----	2.1	----	----	----
ø Exchangeable Sodium	----	0.2	meq/100g	----	10.0	----	----	----
ø Cation Exchange Capacity	----	0.2	meq/100g	----	29.5	----	----	----
ø Exchangeable Calcium Percent	----	0.2	%	----	13.2	----	----	----
ø Exchangeable Magnesium Percent	----	0.2	%	----	45.6	----	----	----
ø Exchangeable Potassium Percent	----	0.2	%	----	7.3	----	----	----
ø Exchangeable Sodium Percent	----	0.2	%	----	33.9	----	----	----
ø Calcium/Magnesium Ratio	----	0.2	-	----	0.3	----	----	----
ø Magnesium/Potassium Ratio	----	0.2	-	----	6.3	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	8	<5	6	<5
Barium	7440-39-3	10	mg/kg	----	----	30	----	----
Beryllium	7440-41-7	1	mg/kg	----	----	<1	----	----
Boron	7440-42-8	50	mg/kg	----	----	<50	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	16	31	10	11	18
Cobalt	7440-48-4	2	mg/kg	----	----	3	----	----
Copper	7440-50-8	5	mg/kg	9	16	9	12	8
Iron	7439-89-6	0.005	%	----	3.91	----	----	----
Lead	7439-92-1	5	mg/kg	40	12	32	52	7
Manganese	7439-96-5	5	mg/kg	----	----	91	----	----
Nickel	7440-02-0	2	mg/kg	14	45	6	7	22

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
				Result	Result	Result	Result	Result
EG005(ED093)T: Total Metals by ICP-AES - Continued								
Selenium	7782-49-2	5	mg/kg	----	----	<5	----	----
Vanadium	7440-62-2	5	mg/kg	----	----	**24**	----	----
Zinc	7440-66-6	5	mg/kg	**56**	**24**	**175**	**107**	**17**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	----	----	<0.5	----	----
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	----	----	<1	----	----
EP004: Organic Matter								
Organic Matter	----	0.5	%	----	**0.9**	----	----	----
Total Organic Carbon	----	0.5	%	----	**0.5**	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	**0.56**	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	<0.05	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	----	----	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
					EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	----	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg		----	----	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg		----	----	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg		----	----	<0.2	<0.2	----
Mirex	2385-85-5	0.05	mg/kg		----	----	<0.05	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	----	<0.05	**0.56**	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		----	----	<0.05	<0.05	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		----	----	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		----	----	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg		----	----	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg		----	----	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg		----	----	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		----	----	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg		----	----	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg		----	----	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg		----	----	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		----	----	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg		----	----	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		----	----	<0.05	<0.05	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		----	----	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		----	----	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg		----	----	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg		----	----	<0.05	<0.05	----
Ethion	563-12-2	0.05	mg/kg		----	----	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg		----	----	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg		----	----	<0.05	<0.05	----
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		----	----	<0.05	----	----
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		----	----	<0.05	----	----
EP069: Toxaphene									
Toxaphene	8001-35-2	2	mg/kg		----	----	<2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
				Result	Result	Result	Result	Result
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	<0.5	<1.2	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	----	<0.5	<1.2	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	----	<0.5	<1.2	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	<1	<2	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	----	<0.5	<1.2	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	<0.5	<1.2	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	----	<0.5	<1.2	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	----	<0.5	<1.2	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	<0.5	<1.2	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	----	<0.5	<1.2	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	----	<0.5	<1.2	----	----
Pentachlorophenol	87-86-5	2	mg/kg	----	<2	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<1.2	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.7	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**1.4**	**0.6**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**2.9**	**1.2**	----
EP080/071: Total Petroleum Hydrocarbons								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	**130**	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	**2000**	**2050**	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	**1160**	**1570**	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	**3290**	**3620**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	**420**	**130**	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	**2800**	**3320**	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	**320**	**830**	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	**3540**	**4280**	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	**420**	**130**	<50
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP202A: Phenoxyacetic Acid Herbicides by LCMS								
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	----	----	<0.02	----	----
2.4-DB	94-82-6	0.02	mg/kg	----	----	<0.02	----	----
Dicamba	1918-00-9	0.02	mg/kg	----	----	<0.02	----	----
Mecoprop	93-65-2	0.02	mg/kg	----	----	<0.02	----	----
MCPA	94-74-6	0.02	mg/kg	----	----	<0.02	----	----
2.4-DP	120-36-5	0.02	mg/kg	----	----	<0.02	----	----
2.4-D	94-75-7	0.02	mg/kg	----	----	<0.02	----	----
Triclopyr	55335-06-3	0.02	mg/kg	----	----	<0.02	----	----
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	----	----	<0.02	----	----
2.4.5-T	93-76-5	0.02	mg/kg	----	----	<0.02	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH08 - 0.1	BH09 - 0.5	BH09 - 0.1	BH10 - 0.1	BH10 - 0.5
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-030	EM2211061-031	EM2211061-033	EM2211061-036	EM2211061-037
				Result	Result	Result	Result	Result
EP202A: Phenoxyacetic Acid Herbicides by LCMS - Continued								
MCPB	94-81-5	0.02	mg/kg	----	----	<0.02	----	----
Picloram	1918-02-1	0.02	mg/kg	----	----	<0.02	----	----
Clopyralid	1702-17-6	0.02	mg/kg	----	----	<0.02	----	----
Fluroxypyr	69377-81-7	0.02	mg/kg	----	----	<0.02	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	110	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	----	----	126	88.1	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	----	----	55.6	58.8	----
EP069: Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	120	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	84.3	91.7	82.2	88.1	----
2-Chlorophenol-D4	93951-73-6	0.5	%	87.7	87.0	79.6	84.3	----
2.4.6-Tribromophenol	118-79-6	0.5	%	73.5	73.9	76.4	87.2	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.6	93.8	88.9	92.9	----
Anthracene-d10	1719-06-8	0.5	%	94.8	97.1	115	102	----
4-Terphenyl-d14	1718-51-0	0.5	%	95.1	95.5	86.1	98.9	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	79.9	----	87.2	88.4	74.6
Toluene-D8	2037-26-5	0.2	%	88.4	----	85.4	91.2	66.6
4-Bromofluorobenzene	460-00-4	0.2	%	90.6	----	93.5	91.8	82.3
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	----	----	84.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
				Result	Result	Result	Result	Result
EA055: Moisture Content								
Moisture Content	----	1.0	%	**----**	**21.9**	**1.8**	**16.9**	**----**
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**4.8**	**----**	**----**	**----**	**6.5**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	**5**	<5
Barium	7440-39-3	10	mg/kg	**70**	**----**	**----**	**----**	**80**
Beryllium	7440-41-7	1	mg/kg	<1	**----**	**----**	**----**	<1
Boron	7440-42-8	50	mg/kg	<50	**----**	**----**	**----**	<50
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**12**	**20**	**14**	**25**	**23**
Cobalt	7440-48-4	2	mg/kg	**4**	**----**	**----**	**----**	**18**
Copper	7440-50-8	5	mg/kg	**11**	**7**	**15**	**10**	**16**
Lead	7439-92-1	5	mg/kg	**141**	**6**	**16**	**10**	**20**
Manganese	7439-96-5	5	mg/kg	**109**	**----**	**----**	**----**	**340**
Nickel	7440-02-0	2	mg/kg	**8**	**15**	**66**	**23**	**69**
Selenium	7782-49-2	5	mg/kg	<5	**----**	**----**	**----**	<5
Vanadium	7440-62-2	5	mg/kg	**21**	**----**	**----**	**----**	**33**
Zinc	7440-66-6	5	mg/kg	**321**	**22**	**80**	**24**	**81**
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	**0.1**	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	**----**	**----**	**----**	**----**
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	**----**	**----**	**----**	**----**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	**----**	**----**	**----**	**----**
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
beta-BHC	319-85-7	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
delta-BHC	319-86-8	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
Heptachlor	76-44-8	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**
Aldrin	309-00-2	0.05	mg/kg	<0.05	**----**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
Mirex	2385-85-5	0.05	mg/kg		<0.05	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP068C: Triazines									
Atrazine	1912-24-9	0.05	mg/kg		<0.05	----	----	----	----
EP068D: Pyrethroids									
Bifenthrin	82657-04-3	0.05	mg/kg		<0.05	----	----	----	----
EP069: Toxaphene									
Toxaphene	8001-35-2	2	mg/kg		<2	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	<0.5	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	<0.5	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	<0.5	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	<0.5	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	<0.5	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		**110**	<100	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**110**	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		**170**	<100	<100	<100	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		**170**	<50	<50	<50	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit		EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
EP202A: Phenoxyacetic Acid Herbicides by LCMS									
4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg		<0.04	----	----	----	----
2.4-DB	94-82-6	0.02	mg/kg		<0.04	----	----	----	----
Dicamba	1918-00-9	0.02	mg/kg		<0.04	----	----	----	----
Mecoprop	93-65-2	0.02	mg/kg		<0.04	----	----	----	----
MCPA	94-74-6	0.02	mg/kg		<0.04	----	----	----	----
2.4-DP	120-36-5	0.02	mg/kg		<0.04	----	----	----	----
2.4-D	94-75-7	0.02	mg/kg		<0.04	----	----	----	----
Triclopyr	55335-06-3	0.02	mg/kg		<0.04	----	----	----	----
2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg		<0.04	----	----	----	----
2.4.5-T	93-76-5	0.02	mg/kg		<0.04	----	----	----	----
MCPB	94-81-5	0.02	mg/kg		<0.04	----	----	----	----
Picloram	1918-02-1	0.02	mg/kg		<0.04	----	----	----	----
Clopyralid	1702-17-6	0.02	mg/kg		<0.04	----	----	----	----
Fluroxypyr	69377-81-7	0.02	mg/kg		<0.04	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		117	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		99.6	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		70.0	----	----	----	----
EP069: Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		92.3	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		86.8	----	97.8	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		82.5	----	93.8	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		72.0	----	84.0	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		89.0	----	102	----	----
Anthracene-d10	1719-06-8	0.5	%		102	----	102	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		88.7	----	102	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		86.3	81.5	91.7	77.6	----
Toluene-D8	2037-26-5	0.2	%		94.8	89.0	98.3	78.9	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BH11 - 0.1	BH11 - 0.5	BH12 - 0.1	BH12 - 0.5	FD01
			Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00	09-Jun-2022 00:00
Compound	CAS Number	LOR	Unit	EM2211061-039	EM2211061-040	EM2211061-042	EM2211061-043	EM2211061-045
				Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued								
4-Bromofluorobenzene	460-00-4	0.2	%	**93.9**	**90.9**	**99.8**	**82.8**	**----**
EP202S: Phenoxyacetic Acid Herbicide Surrogate								
2.4-Dichlorophenyl Acetic Acid	19719-28-9	0.02	%	**63.8**	**----**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RINS01	TRIP01	----	----	----
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EM2211061-046	EM2211061-047	--------	--------	--------
					Result	Result	----	----	----
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Boron	7440-42-8	0.05	mg/L		<0.05	----	----	----	----
Barium	7440-39-3	0.001	mg/L		<0.001	----	----	----	----
Beryllium	7440-41-7	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		**0.002**	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Manganese	7439-96-5	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Selenium	7782-49-2	0.01	mg/L		<0.01	----	----	----	----
Vanadium	7440-62-2	0.01	mg/L		<0.01	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		----	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		----	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L		----	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		----	<50	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	µg/L		----	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		----	<20	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		----	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		----	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		----	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		----	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		----	<100	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		----	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		----	<1	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RINS01	TRIP01	----	----	----
				Sampling date / time	09-Jun-2022 00:00	09-Jun-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EM2211061-046	EM2211061-047	--------	--------	--------
					Result	Result	----	----	----
EP080: BTEXN - Continued									
Toluene	108-88-3	2	µg/L		----	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		----	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		----	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		----	<2	----	----	----
^ **Total Xylenes**	----	2	µg/L		----	<2	----	----	----
^ **Sum of BTEX**	----	1	µg/L		----	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		----	<5	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		----	**103**	----	----	----
Toluene-D8	2037-26-5	2	%		----	**96.4**	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		----	**99.6**	----	----	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	62	128
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	40	139
EP069: Surrogate			
Decachlorobiphenyl	2051-24-3	70	130
EP074S: VOC Surrogates (Ultra-Trace)			
1.2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	54	125
2-Chlorophenol-D4	93951-73-6	65	123
2.4.6-Tribromophenol	118-79-6	34	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	61	125
Anthracene-d10	1719-06-8	62	130
4-Terphenyl-d14	1718-51-0	67	133
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2.4.6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1.2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	56	124
EP202S: Phenoxyacetic Acid Herbicide Surrogate			
2.4-Dichlorophenyl Acetic Acid	19719-28-9	45	139

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	***Low***	***High***
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	129
Toluene-D8	2037-26-5	70	125
4-Bromofluorobenzene	460-00-4	71	129

Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA150: Soil Classification based on Particle Size

(SOIL) EA152: Soil Particle Density

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry) 14913 (Biology).

(SOIL) EP202A: Phenoxyacetic Acid Herbicides by LCMS

(SOIL) EP202S: Phenoxyacetic Acid Herbicide Surrogate

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2211061**	Page	: 1 of 16
Client	: **EDGE GROUP PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: NATASHA DUN	Telephone	: +61-3-8549 9600
Project	: 20220134	Date Samples Received	: 10-Jun-2022
Site	: Hopetoun Park	Issue Date	: 24-Jun-2022
Sampler	: GM and ED	No. of samples received	: 49
Order number	: ----	No. of samples analysed	: 27

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **Quality Control Sample Frequency Outliers exist - please see following pages for full details.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EM2211035--001	Anonymous	**Lead**	7439-92-1	132 %	0% - 20%	**RPD exceeds LOR based limits**
EG005(ED093)T: Total Metals by ICP-AES	EM2211061--014	BH05 - 0.5	**Manganese**	7439-96-5	32.9 %	0% - 20%	**RPD exceeds LOR based limits**
EG005(ED093)T: Total Metals by ICP-AES	EM2211035--013	Anonymous	**Zinc**	7440-66-6	35.1 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Acenaphthylene**	208-96-8	56.8 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Fluorene**	86-73-7	69.4 %	0% - 50%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Phenanthrene**	85-01-8	36.7 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Anthracene**	120-12-7	39.0 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Fluoranthene**	206-44-0	40.1 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Pyrene**	129-00-0	37.8 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Benz(a)anthracene**	56-55-3	37.6 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Chrysene**	218-01-9	42.0 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Benzo(b+j) & Benzo(k)fluoranthene**	205-99-2 207-08-9	43.6 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Benzo(a)pyrene**	50-32-8	40.3 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Indeno(1.2.3.cd)pyrene**	193-39-5	33.9 %	0% - 20%	**RPD exceeds LOR based limits**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2211035--001	Anonymous	**Benzo(g.h.i)perylene**	191-24-2	31.1 %	0% - 20%	**RPD exceeds LOR based limits**
Matrix Spike (MS) Recoveries							
EP202A: Phenoxyacetic Acid Herbicides by LCMS	EM2210264--004	Anonymous	**Picloram**	1918-02-1	39.1 %	49.0-138%	**Recovery less than lower data quality objective**
EP202A: Phenoxyacetic Acid Herbicides by LCMS	EM2210264--004	Anonymous	**Clopyralid**	1702-17-6	20.6 %	49.0-149%	**Recovery less than lower data quality objective**

Outliers : Frequency of Quality Control Samples

Matrix: **SOIL**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Electrical Conductivity (1:5) on 40°C dried soil	0	5	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
pH (1:5) on 40°C dried soil	0	5	0.00	10.00	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
TRH - Semivolatile Fraction	0	9	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
TRH - Semivolatile Fraction	0	9	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved (EA001)							
BH07 - 0.1, SP01, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
EA002-AD: pH (Soils) dried at 40°C							
Soil Glass Jar - Unpreserved (EA002-AD)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	16-Jun-2022	✓	**17-Jun-2022**	17-Jun-2022	✓
EA010-AD: Conductivity (Soils) dried at 40°C							
Soil Glass Jar - Unpreserved (EA010-AD)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	16-Jun-2022	✓	**17-Jun-2022**	14-Jul-2022	✓
EA055: Moisture Content							
Soil Glass Jar - Unpreserved (EA055)							
BH10 - 0.5, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**----**	----	----	**15-Jun-2022**	23-Jun-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
BH01 - 0.1, BH01 - 0.5, BH02 - 0.1, BH03 - 0.1, BH03 - 0.5, BH04 - 0.1, BH05 - 0.1, BH05 - 0.5, BH06 - 0.1, BH07 - 0.1, SP01, SP03, SP05, SP07, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH11 - 0.1, FD01	**09-Jun-2022**	**----**	----	----	**15-Jun-2022**	23-Jun-2022	✓
EA150: Soil Classification based on Particle Size							
Soil Glass Jar - Unpreserved (EA150H)							
BH07 - 0.1	**09-Jun-2022**	**----**	----	----	**22-Jun-2022**	06-Dec-2022	✓
EA152: Soil Particle Density							
Soil Glass Jar - Unpreserved (EA152)							
BH07 - 0.1	**09-Jun-2022**	**----**	----	----	**22-Jun-2022**	06-Dec-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
ED006: Exchangeable Cations on Alkaline Soils							
Soil Glass Jar - Unpreserved (ED006)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**20-Jun-2022**	07-Jul-2022	✓	**20-Jun-2022**	07-Jul-2022	✓
ED007: Exchangeable Cations							
Soil Glass Jar - Unpreserved (ED007)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	07-Jul-2022	✓	**20-Jun-2022**	07-Jul-2022	✓
ED008: Exchangeable Cations							
Soil Glass Jar - Unpreserved (ED008)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	07-Jul-2022	✓	**20-Jun-2022**	07-Jul-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
BH01 - 0.1, BH01 - 0.5, BH02 - 0.1, BH03 - 0.1, BH03 - 0.5, BH04 - 0.1, BH05 - 0.1, BH05 - 0.5, BH06 - 0.1, BH07 - 0.1, SP01, SP03, SP05, SP07, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, FD01, BH12 - 0.5	**09-Jun-2022**	**17-Jun-2022**	06-Dec-2022	✓	**17-Jun-2022**	06-Dec-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
BH01 - 0.1, BH01 - 0.5, BH02 - 0.1, BH03 - 0.1, BH03 - 0.5, BH04 - 0.1, BH05 - 0.1, BH05 - 0.5, BH06 - 0.1, BH07 - 0.1, SP01, SP03, SP05, SP07, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, FD01, BH12 - 0.5	**09-Jun-2022**	**17-Jun-2022**	07-Jul-2022	✓	**17-Jun-2022**	07-Jul-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
BH01 - 0.1, BH07 - 0.1, SP01, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	07-Jul-2022	✓	**17-Jun-2022**	23-Jun-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF)							
SP01	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	30-Jun-2022	✓
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK028SF)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	30-Jun-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T)							
SP01	**09-Jun-2022**	**16-Jun-2022**	07-Jul-2022	✓	**20-Jun-2022**	07-Jul-2022	✓
EP004: Organic Matter							
Soil Glass Jar - Unpreserved (EP004)							
BH07 - 0.1, BH09 - 0.5	**09-Jun-2022**	**17-Jun-2022**	07-Jul-2022	✓	**17-Jun-2022**	07-Jul-2022	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
BH01 - 0.1, BH07 - 0.1, SP01, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH10 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH10 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP068C: Triazines							
Soil Glass Jar - Unpreserved (EP068)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP068D: Pyrethroids							
Soil Glass Jar - Unpreserved (EP068)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP069: Toxaphene							
Soil Glass Jar - Unpreserved (EP069)							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SP01	**09-Jun-2022**	**15-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT)							
SP01	**09-Jun-2022**	**15-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT)							
SP01	**09-Jun-2022**	**15-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM))							
BH01 - 0.1, BH07 - 0.1, BH09 - 0.1, BH11 - 0.1, BH12 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	26-Jul-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP05, SP09, BH08 - 0.1, BH09 - 0.1, BH10 - 0.1, BH11 - 0.1	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
SP07, BH09 - 0.5	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	26-Jul-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SP01	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SP01	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM)							
SP01	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM)							
SP01	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SP01	**09-Jun-2022**	**15-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP05, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**15-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	23-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP01, SP05, SP07, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SP07	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	26-Jul-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT)							
SP01	**09-Jun-2022**	**15-Jun-2022**	16-Jun-2022	✓	**16-Jun-2022**	16-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP05, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**15-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	23-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP01, SP05, SP07, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	26-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SP07	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	26-Jul-2022	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
BH01 - 0.1, BH02 - 0.1, BH03 - 0.1, BH04 - 0.1, BH05 - 0.1, BH06 - 0.1, BH07 - 0.1, SP05, SP09, BH08 - 0.1, BH09 - 0.5, BH09 - 0.1, BH10 - 0.1, BH10 - 0.5, BH11 - 0.1, BH11 - 0.5, BH12 - 0.1, BH12 - 0.5	**09-Jun-2022**	**15-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	23-Jun-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SP07	**09-Jun-2022**	**16-Jun-2022**	23-Jun-2022	✓	**16-Jun-2022**	23-Jun-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP202A: Phenoxyacetic Acid Herbicides by LCMS							
Soil Glass Jar - Unpreserved (EP202)							
BH09 - 0.1, BH11 - 0.1	**09-Jun-2022**	**17-Jun-2022**	23-Jun-2022	✓	**17-Jun-2022**	27-Jul-2022	✓
Soil Glass Jar - Unpreserved (EP202)							
BH01 - 0.1, BH07 - 0.1	**09-Jun-2022**	**22-Jun-2022**	23-Jun-2022	✓	**23-Jun-2022**	01-Aug-2022	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
RINS01	**09-Jun-2022**	**14-Jun-2022**	06-Dec-2022	✓	**14-Jun-2022**	06-Dec-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
RINS01	**09-Jun-2022**	**----**	----	----	**14-Jun-2022**	07-Jul-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
TRIP01	**09-Jun-2022**	**14-Jun-2022**	16-Jun-2022	✓	**14-Jun-2022**	24-Jul-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TRIP01	**09-Jun-2022**	**14-Jun-2022**	23-Jun-2022	✓	**14-Jun-2022**	23-Jun-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
TRIP01	**09-Jun-2022**	**14-Jun-2022**	16-Jun-2022	✓	**14-Jun-2022**	24-Jul-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TRIP01	**09-Jun-2022**	**14-Jun-2022**	23-Jun-2022	✓	**14-Jun-2022**	23-Jun-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
TRIP01	**09-Jun-2022**	**14-Jun-2022**	23-Jun-2022	✓	**14-Jun-2022**	23-Jun-2022	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Electrical Conductivity (1:5) on 40°C dried soil	EA010-AD	0	5	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	2	10	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	17	**17.65**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH (1:5) on 40°C dried soil	EA002-AD	0	5	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	3	11	**27.27**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	7	40	**17.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Toxaphene by GCMS	EP069	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	19	**15.79**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	22	**13.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Electrical Conductivity (1:5) on 40°C dried soil	EA010-AD	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH (1:5) on 40°C dried soil	EA002-AD	2	5	**40.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	2	6	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Toxaphene by GCMS	EP069	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	19	**10.53**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	22	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Electrical Conductivity (1:5) on 40°C dried soil	EA010-AD	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Exchangeable Cations on Alkaline Soils	ED006	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	2	6	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Toxaphene by GCMS	EP069	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	19	**10.53**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	22	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Organic Matter	EP004	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS) - Continued							
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Toxaphene by GCMS	EP069	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	22	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
WAD Cyanide by Segmented Flow Analyser	EK028SF	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	16	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	9	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Total Mercury by FIMS	EG035T	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	11.11	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Mercury by FIMS	EG035T	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	11.11	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	9	0.00	5.00	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
pH (1:5) on 40°C dried soil	EA002-AD	SOIL	In house: Referenced to Rayment and Lyons 4A1 and APHA 4500H+. pH is determined on 40°C dried soil after a 1:5 soil/water leach. This method is compliant with NEPM Schedule B(3)
Electrical Conductivity (1:5) on 40°C dried soil	EA010-AD	SOIL	In house: Referenced to Rayment and Lyons 3A1 and APHA 2510. Conductivity is determined on soil samples dried at 40°C using a 1:5 soil/water leach. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Particle Size Analysis by Hydrometer	EA150H	SOIL	Particle Size Analysis by Hydrometer according to AS1289.3.6.3
Soil Particle Density	EA152	SOIL	Soil Particle Density by AS 1289.3.5.1: Methods of testing soils for engineering purposes - Soil classification tests - Determination of the soil particle density of a soil - Standard method
Exchangeable Cations on Alkaline Soils	* ED006	SOIL	In house: Referenced to Soil Survey Test Method C5. Soluble salts are removed from the sample prior to analysis. Cations are exchanged from the sample by contact with alcoholic ammonium chloride at pH 8.5. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil.
Exchangeable Cations	ED007	SOIL	In house: Referenced to Rayment & Lyons Method 15A1. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM Schedule B(3).
Exchangeable Cations with pre-treatment	ED008	SOIL	In house: Referenced to Rayment & Lyons Method 15A2. Soluble salts are removed from the sample prior to analysis. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
WAD Cyanide by Segmented Flow Analyser	EK028SF	SOIL	In house: Referenced to APHA 4500-CN C&O / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Hydrogen cyanide is liberated from a slightly acidified (pH 4.5) and is dialysed. Tight cyanide complexes that would not be amenable to oxidation by chlorine are not converted. Iron cyanide complexes are precipitated with zinc acetate. Liberated HCN diffuses through a membrane into a stream of sodium hydroxide where it is carried as CN- The cyanide in caustic solution is buffered to pH 5.2 and further converted to cyanogen chloride by reaction with chloramine-T. Cyanogen chloride subsequently reacts with 4 ¿pyridine carboxylic and 1,3 - dimethylbarbituric acids to give a red colour complex. This colour is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
Organic Matter	EP004	SOIL	In house: Referenced to AS1289.4.1.1. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
Toxaphene by GCMS	EP069	SOIL	In house: Referenced to USEPA 8276. Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Phenoxyacetic Acid Herbicides (LCMS - Standard DL)	EP202	SOIL	In house: LCMS (Electrospray in negative mode). Residues of acid herbicides are extracted from soil samples under the alkaline condition. An aliquot of the alkaline aqueous phase is taken and acidified before a SPE cleanup. After eluting off from the SPE cartridge, residues of acid herbicides are dissolved in HPLC mobile phase prior to instrument analysis.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Exchangeable Cations Preparation Method (Alkaline Soils)	ED006PR	SOIL	In house: Referenced to Rayment and Lyons method 15C1.
Exchangeable Cations Preparation Method	ED007PR	SOIL	In house: Referenced to Rayment & Lyons method 15A1. A 1M NH4Cl extraction by end over end tumbling at a ratio of 1:20. There is no pretreatment for soluble salts. Extracts can be run by ICP for cations.

Preparation Methods	Method	Matrix	Method Descriptions
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
1:5 solid / water leach following drying at 40°C	EN34-AD	SOIL	10 g of 40°C dried soil is mixed with 50 mL of reagent grade water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Organic Matter	EP004-PR	SOIL	In house: Referenced to AS1289.4.1.1. Dichromate oxidation method after Walkley and Black. This method is compliant with NEPM Schedule B(3).
Extraction for Phenoxy Acid Herbicides in Soils.	EP202-PR	SOIL	In-House: Alkaline extract followed by SPE clean up of acidified portion of the sample extract.
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EM2211061**	Page	: 1 of 32
Client	: **EDGE GROUP PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: NATASHA DUN	Contact	: Hannah White
Address	: 423 City Rd South Melbourne	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: 20220134	Date Samples Received	: 10-Jun-2022
Order number	: ----	Date Analysis Commenced	: 14-Jun-2022
C-O-C number	: ----	Issue Date	: 24-Jun-2022
Sampler	: GM and ED		
Site	: Hopetoun Park		
Quote number	: MEBQ/108/21 Primary Work		
No. of samples received	: 49		
No. of samples analysed	: 27		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Aleksandar Vujkovic	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics, Springvale, VIC
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General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4400651)									
EM2211035-001	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	381	# 1870	132	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	196	195	0.0	0% - 20%
EM2211035-013	Anonymous	EG005T: Zinc	7440-66-6	5	mg/kg	102	# 71	35.1	0% - 20%
EM2211035-001	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	280	290	0.0	0% - 20%
		EG005T: Chromium	7440-47-3	2	mg/kg	13	12	10.2	No Limit
		EG005T: Cobalt	7440-48-4	2	mg/kg	6	5	27.8	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	18	16	15.5	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	<5	42.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	44	48	8.7	No Limit
		EG005T: Manganese	7439-96-5	5	mg/kg	70	73	3.7	0% - 50%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	8	<5	46.4	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	16	11	36.0	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.0	No Limit
EM2211035-013	Anonymous	EG005T: Beryllium	7440-41-7	1	mg/kg	2	1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	140	90	40.6	0% - 50%
		EG005T: Chromium	7440-47-3	2	mg/kg	33	31	7.1	0% - 50%
		EG005T: Cobalt	7440-48-4	2	mg/kg	11	9	23.7	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4400651) - continued									
EM2211035-013	Anonymous	EG005T: Nickel	7440-02-0	2	mg/kg	22	20	9.6	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	11	24.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	22	28	23.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	62	41	39.6	0% - 50%
		EG005T: Manganese	7439-96-5	5	mg/kg	50	47	4.7	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	42	34	21.8	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.0	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4400652)									
EM2211061-014	BH05 - 0.5	EG005T: Chromium	7440-47-3	2	mg/kg	42	41	0.0	0% - 20%
		EG005T: Cobalt	7440-48-4	2	mg/kg	15	18	20.7	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	29	28	0.0	0% - 50%
		EG005T: Manganese	7439-96-5	5	mg/kg	89	# 124	32.9	0% - 20%
		EG005T: Vanadium	7440-62-2	5	mg/kg	64	64	0.0	0% - 50%
EM2211061-014	BH05 - 0.5	EG005T: Beryllium	7440-41-7	1	mg/kg	<1	2	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	40	60	56.7	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	11	58.7	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	8	16	62.3	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	16	71.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	17	61.3	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	<50	<50	0.0	No Limit
		EG005T: Iron	7439-89-6	50	mg/kg	21000	20700	1.2	0% - 20%
EM2211061-031	BH09 - 0.5	EG005T: Beryllium	7440-41-7	1	mg/kg	1	1	0.0	No Limit
		EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Barium	7440-39-3	10	mg/kg	600	620	3.6	0% - 20%
		EG005T: Chromium	7440-47-3	2	mg/kg	31	29	7.7	0% - 50%
		EG005T: Cobalt	7440-48-4	2	mg/kg	21	18	14.6	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	45	44	2.5	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	9	14.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	16	15	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	13	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4400652) - continued									
EM2211061-031	BH09 - 0.5	EG005T: Manganese	7439-96-5	5	mg/kg	514	501	2.5	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Vanadium	7440-62-2	5	mg/kg	68	72	5.3	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	24	23	0.0	No Limit
		EG005T: Boron	7440-42-8	50	mg/kg	60	50	0.0	No Limit
		EG005T: Iron	7439-89-6	50	mg/kg	3.91 %	39600	1.1	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4400656)									
EM2210946-002	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	6.0	6.1	0.0	0% - 20%
EM2211061-020	SP01	EA001: pH (CaCl2)	----	0.1	pH Unit	7.5	7.6	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4400803)									
EM2211061-001	BH01 - 0.1	EA055: Moisture Content	----	0.1	%	6.8	7.5	9.5	No Limit
EM2211061-020	SP01	EA055: Moisture Content	----	0.1	%	7.4	7.4	0.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4400804)									
EM2211061-039	BH11 - 0.1	EA055: Moisture Content	----	0.1	%	4.8	3.8	23.6	No Limit
EM2211149-002	Anonymous	EA055: Moisture Content	----	0.1	%	10.5	9.7	8.2	0% - 50%
ED006: Exchangeable Cations on Alkaline Soils (QC Lot: 4403505)									
EM2211061-019	BH07 - 0.1	ED006: Calcium/Magnesium Ratio	----	0.1	-	1.1	1.0	0.0	No Limit
		ED006: Magnesium/Potassium Ratio	----	0.1	-	4.4	4.4	0.0	0% - 20%
		ED006: Exchangeable Calcium Percent	----	0.2	%	38.0	37.7	0.8	0% - 20%
		ED006: Exchangeable Magnesium Percent	----	0.2	%	35.7	35.7	0.0	0% - 20%
		ED006: Exchangeable Potassium Percent	----	0.2	%	8.1	8.2	0.0	0% - 20%
		ED006: Exchangeable Sodium Percent	----	0.2	%	18.2	18.4	1.4	0% - 20%
		ED006: Exchangeable Calcium	----	0.2	meq/100g	4.7	4.8	2.4	0% - 20%
		ED006: Exchangeable Magnesium	----	0.2	meq/100g	4.4	4.6	3.2	0% - 20%
		ED006: Exchangeable Potassium	----	0.2	meq/100g	1.0	1.0	0.0	No Limit
		ED006: Exchangeable Sodium	----	0.2	meq/100g	2.2	2.4	4.6	0% - 50%
		ED006: Cation Exchange Capacity	----	0.2	meq/100g	12.4	12.8	3.2	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4400650)									
EM2211035-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.2	0.1	0.0	No Limit
EM2211035-013	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4400653)									
EM2211061-014	BH05 - 0.5	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2211061-031	BH09 - 0.5	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4400826)									
EM2210622-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2211061-001	BH01 - 0.1	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4403123)									
EM2211058-006	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4403123) - continued									
EM2210714-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QC Lot: 4403126)									
EM2211061-001	BH01 - 0.1	EK028SF: Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4400820)									
EM2210946-002	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	370	330	10.7	No Limit
EM2211131-030	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	130	120	10.4	No Limit
EP004: Organic Matter (QC Lot: 4405872)									
EM2210740-005	Anonymous	EP004: Organic Matter	----	0.5	%	26.7	26.0	2.4	0% - 20%
		EP004: Total Organic Carbon	----	0.5	%	15.5	15.1	2.4	0% - 20%
EM2211170-029	Anonymous	EP004: Organic Matter	----	0.5	%	3.3	3.4	0.0	No Limit
		EP004: Total Organic Carbon	----	0.5	%	1.9	1.9	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4400518)									
EM2211035-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.4	<0.4	0.0	No Limit
EM2211156-059	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4400532)									
EM2211061-001	BH01 - 0.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4400531)									
EM2211061-001	BH01 - 0.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Mirex	2385-85-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4400531)									
EM2211061-001	BH01 - 0.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068C: Triazines (QC Lot: 4400531)									
EM2211061-001	BH01 - 0.1	EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP068D: Pyrethroids (QC Lot: 4400531)									
EM2211061-001	BH01 - 0.1	EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP069: Toxaphene (QC Lot: 4400534)									
EM2211061-001	BH01 - 0.1	EP069: Toxaphene	8001-35-2	2	mg/kg	<2	<2	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4400434)									
EM2210946-002	Anonymous	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4400434)									
EM2210946-002	Anonymous	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4400434)									
EM2210946-002	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4400434) - continued									
EM2210946-002	Anonymous	EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	0.0	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 4400535)									
EM2211061-033	BH09 - 0.1	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<2	<2	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EM2211061-001	BH01 - 0.1	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)A: Phenolic Compounds (QC Lot: 4400535) - continued									
EM2211061-001	BH01 - 0.1	EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 4403571)									
EM2211061-026	SP07	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4400535)									
EM2211061-033	BH09 - 0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<1.2	<1.2	0.0	No Limit
EM2211061-001	BH01 - 0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4400535) - continued									
EM2211061-001	BH01 - 0.1	EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4403571)									
EM2211061-026	SP07	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4400516)									
EM2211035-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.3	<0.3	0.0	No Limit
EM2211156-059	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4400516) - continued									
EM2211156-059	Anonymous	EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4400516)									
EM2211035-001	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	2	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	2	2	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<6	<6	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<6	<6	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<6	<6	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<6	<6	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<6	<6	0.0	No Limit
EM2211156-059	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4400516)									
EM2211035-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	2.4	1.8	29.8	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	1.7	0.7	85.2	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	20.2	# 11.3	56.8	0% - 20%
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	9.7	# 4.7	69.4	0% - 50%
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	108	# 74.5	36.7	0% - 20%
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	34.8	# 23.5	39.0	0% - 20%
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	176	# 117	40.1	0% - 20%
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	178	# 121	37.8	0% - 20%
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	101	# 68.8	37.6	0% - 20%
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	89.7	# 58.5	42.0	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4400516) - continued									
EM2211035-001	Anonymous	EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	99.8	# 66.3	40.3	0% - 20%
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	32.7	# 23.2	33.9	0% - 20%
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	9.8	6.9	34.9	0% - 50%
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	30.4	# 22.2	31.1	0% - 20%
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	170	# 109	43.6	0% - 20%
EM2211156-059	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4400516)									
EM2211035-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.14	<0.14	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4400516) - continued									
EM2211035-001	Anonymous	EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.14	<0.14	0.0	No Limit
EM2211156-059	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4400434)									
EM2210946-002	Anonymous	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4400437)									
EM2211061-001	BH01 - 0.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM2211061-031	BH09 - 0.5	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4400517)									
EM2211035-001	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	4070	3340	19.6	0% - 20%
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	2330	2100	10.2	0% - 20%
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	100	80	23.7	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	6500	5520	16.3	0% - 20%
EM2211156-059	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4400533)									
EM2211061-033	BH09 - 0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	2000	2150	7.4	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4400533) - continued									
EM2211061-033	BH09 - 0.1	EP071: C29 - C36 Fraction	----	100	mg/kg	1160	1240	6.0	0% - 50%
		EP071: C10 - C14 Fraction	----	50	mg/kg	130	150	13.5	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	3290	3540	7.3	0% - 20%
EM2211061-001	BH01 - 0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4403549)									
EM2210115-103	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4403572)									
EM2211061-026	SP07	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4400434)									
EM2210946-002	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4400437)									
EM2211061-001	BH01 - 0.1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EM2211061-031	BH09 - 0.5	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4400517)									
EM2211035-001	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	5890	4990	16.5	0% - 20%
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	1160	1100	5.1	0% - 50%
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	200	150	25.4	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	7250	6240	15.0	0% - 20%
EM2211156-059	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4400533)									
EM2211061-033	BH09 - 0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	2800	2990	6.5	0% - 20%
		EP071: >C34 - C40 Fraction	----	100	mg/kg	320	350	8.3	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	420	470	10.9	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	3540	3810	7.3	0% - 20%
EM2211061-001	BH01 - 0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4403549)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4403549) - continued									
EM2210115-103	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	18	18	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4403572)									
EM2211061-026	SP07	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 4400437)									
EM2211061-001	BH01 - 0.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM2211061-031	BH09 - 0.5	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4403549)									
EM2210115-103	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	3.2	3.2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	0.7	0.7	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	1.7	1.8	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	0.8	0.8	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QC Lot: 4404347)									
EM2210264-004	Anonymous	EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QC Lot: 4404347) - continued									
EM2210264-004	Anonymous	EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020T: Total Metals by ICP-MS (QC Lot: 4396945)									
EM2210986-003	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.0003	86.1	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.001	0.003	87.3	No Limit
		EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	0.002	0.0	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	0.053	0.055	5.0	0% - 20%
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.005	0.006	0.0	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	0.009	0.013	40.3	0% - 50%
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.010	0.015	36.1	0% - 50%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.004	0.006	41.6	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	0.278	0.281	0.9	0% - 20%
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.013	0.014	8.8	0% - 50%
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.024	0.034	34.1	No Limit
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-T: Vanadium	7440-62-2	0.01	mg/L	0.02	0.03	47.2	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EM2211053-018	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-T: Vanadium	7440-62-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4398048)									
EM2210631-038	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EM2210955-016	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4394056)									

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4394056) - continued									
EB2216475-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EM2210827-034	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4394056)									
EB2216475-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EM2210827-034	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4394056)									
EB2216475-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit
EM2210827-034	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4400651)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	97.2	70.0	130
EG005T: Barium	7440-39-3	10	mg/kg	<10	99.3 mg/kg	90.0	70.0	130
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	0.67 mg/kg	94.1	70.0	130
EG005T: Boron	7440-42-8	50	mg/kg	<50	----	----	----	----
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	119	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	89.9	70.0	130
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	11.2 mg/kg	91.0	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	87.4	70.0	130
EG005T: Iron	7439-89-6	50	mg/kg	<50	33227 mg/kg	98.6	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	89.8	70.0	130
EG005T: Manganese	7439-96-5	5	mg/kg	<5	590 mg/kg	87.8	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	79.1	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	92.0	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	70.4	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	93.9	70.0	130
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	61.3 mg/kg	89.3	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	73.5	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4400652)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	101	70.0	130
EG005T: Barium	7440-39-3	10	mg/kg	<10	99.3 mg/kg	90.4	70.0	130
EG005T: Beryllium	7440-41-7	1	mg/kg	<1	0.67 mg/kg	94.3	70.0	130
EG005T: Boron	7440-42-8	50	mg/kg	<50	----	----	----	----
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	115	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	92.5	70.0	130
EG005T: Cobalt	7440-48-4	2	mg/kg	<2	11.2 mg/kg	95.5	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	87.9	70.0	130
EG005T: Iron	7439-89-6	50	mg/kg	<50	33227 mg/kg	102	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	92.9	70.0	130
EG005T: Manganese	7439-96-5	5	mg/kg	<5	590 mg/kg	91.0	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	71.0	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	94.6	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	82.4	70.0	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4400652) - continued								
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	87.0	70.0	130
EG005T: Vanadium	7440-62-2	5	mg/kg	<5	61.3 mg/kg	91.8	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	76.9	70.0	130
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4400656)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	100	99.3	101
EA002-AD: pH (Soils) dried at 40°C (QCLot: 4403502)								
EA002-AD: pH Value	----	----	pH Unit	----	4 pH Unit	100	98.8	101
				----	7 pH Unit	100	99.3	101
EA010-AD: Conductivity (Soils) dried at 40°C (QCLot: 4403501)								
EA010-AD: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	1413 µS/cm	99.8	90.0	110
ED006: Exchangeable Cations on Alkaline Soils (QCLot: 4403505)								
ED006: Exchangeable Calcium	----	0.2	meq/100g	<0.2	33 meq/100g	86.7	66.6	101
ED006: Exchangeable Magnesium	----	0.2	meq/100g	<0.2	32 meq/100g	79.3	66.9	120
ED006: Exchangeable Potassium	----	0.2	meq/100g	<0.2	2.2 meq/100g	92.6	72.8	119
ED006: Exchangeable Sodium	----	0.2	meq/100g	<0.2	5.6 meq/100g	96.9	67.5	112
ED006: Cation Exchange Capacity	----	0.2	meq/100g	<0.2	----	----	----	----
ED006: Exchangeable Calcium Percent	----	0.2	%	<0.2	----	----	----	----
ED006: Exchangeable Magnesium Percent	----	0.2	%	<0.2	----	----	----	----
ED006: Exchangeable Potassium Percent	----	0.2	%	<0.2	----	----	----	----
ED006: Exchangeable Sodium Percent	----	0.2	%	<0.2	----	----	----	----
ED006: Calcium/Magnesium Ratio	----	0.1	-	<0.1	----	----	----	----
ED006: Magnesium/Potassium Ratio	----	0.1	-	<0.1	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4400650)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	87.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4400653)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	82.8	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4400826)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	80.3	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4403123)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	84.2	70.0	130
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QCLot: 4403126)								
EK028SF: Weak Acid Dissociable Cyanide	----	1	mg/kg	<1	20 mg/kg	81.9	70.0	130
EK040T: Fluoride Total (QCLot: 4400820)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	78.4	75.2	110
EP004: Organic Matter (QCLot: 4405872)								
EP004: Organic Matter	----	0.5	%	<0.5	77 %	90.4	70.0	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP004: Organic Matter (QCLot: 4405872) - continued								
EP004: Total Organic Carbon	----	0.5	%	<0.5	43.5 %	92.9	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4400518)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	109	67.4	136
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4400532)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	89.7	68.0	133
EP068A: Organochlorine Pesticides (OC) (QCLot: 4400531)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.0	71.8	126
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	72.2	125
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	70.0	124
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	79.0	69.1	124
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.5	69.2	125
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	66.6	122
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	68.8	123
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	67.2	124
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	66.0	126
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	70.2	126
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	83.3	72.1	124
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	68.0	122
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	68.9	124
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	71.1	55.8	130
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	67.9	124
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.9	72.0	127
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	66.3	131
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	62.4	131
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	88.2	55.4	130
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.3	68.8	128
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	86.8	55.5	132
EP068: Mirex	2385-85-5	0.05	mg/kg	<0.05	0.5 mg/kg	97.2	92.4	102
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4400531)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	65.6	127
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	78.4	63.0	129
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	53.4	10.0	136
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.4	58.3	128
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.0	69.0	122
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	76.8	68.0	122
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	73.8	59.6	124
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.6	63.8	128
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	71.1	124

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4400531) - continued								
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	67.4	126
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	70.0	57.9	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	66.2	123
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	64.1	59.8	123
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	65.4	127
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	59.6	52.1	128
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	79.1	65.2	122
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	69.8	63.2	124
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	65.9	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	130	43.1	131
EP068C: Triazines (QCLot: 4400531)								
EP068: Atrazine	1912-24-9	0.05	mg/kg	<0.05	0.5 mg/kg	78.0	72.5	126
EP068D: Pyrethroids (QCLot: 4400531)								
EP068: Bifenthrin	82657-04-3	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	67.9	128
EP069: Toxaphene (QCLot: 4400534)								
EP069: Toxaphene	8001-35-2	2	mg/kg	<2	10 mg/kg	66.6	64.0	132
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4400434)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	89.5	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	90.4	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	89.6	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	86.4	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	88.7	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	88.1	68.4	110
EP074H: Naphthalene (QCLot: 4400434)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	82.9	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4400434)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	82.9	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	90.4	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	97.7	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	93.8	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	90.4	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	93.0	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	88.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	88.0	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	96.2	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	88.8	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	98.8	72.6	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074I: Volatile Halogenated Compounds (QCLot: 4400434) - continued								
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	87.1	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	89.7	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	93.2	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	87.8	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	91.2	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	83.8	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	90.6	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	83.9	48.4	120
EP075(SIM)A: Phenolic Compounds (QCLot: 4400535)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	3 mg/kg	92.0	81.2	121
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	3 mg/kg	95.2	83.2	120
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	3 mg/kg	95.7	81.6	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	6 mg/kg	97.4	79.7	129
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	3 mg/kg	92.2	49.8	129
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	3 mg/kg	95.0	81.5	127
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	3 mg/kg	101	74.2	125
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	3 mg/kg	96.5	79.8	121
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	3 mg/kg	82.8	71.5	121
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	3 mg/kg	88.5	67.8	119
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	3 mg/kg	84.1	64.5	126
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	6 mg/kg	62.2	10.0	118
EP075(SIM)A: Phenolic Compounds (QCLot: 4403571)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	3 mg/kg	92.1	81.2	121
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	3 mg/kg	89.5	83.2	120
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	3 mg/kg	90.9	81.6	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	6 mg/kg	88.4	79.7	129
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	3 mg/kg	85.7	49.8	129
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	3 mg/kg	89.6	81.5	127
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	3 mg/kg	87.0	74.2	125
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	3 mg/kg	88.3	79.8	121
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	3 mg/kg	87.8	71.5	121
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	3 mg/kg	81.4	67.8	119
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	3 mg/kg	83.4	64.5	126
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	6 mg/kg	73.8	10.0	118
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4400535)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	98.8	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	93.3	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	95.2	83.6	120

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4400535) - continued								
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	92.4	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	96.1	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	98.2	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	96.2	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	98.8	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	92.4	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	94.3	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	88.2	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	95.7	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	85.0	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	78.1	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	77.4	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	85.2	65.8	127
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4403571)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	3 mg/kg	93.8	85.7	123
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	3 mg/kg	93.6	81.0	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	3 mg/kg	94.3	83.6	120
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	3 mg/kg	91.6	81.3	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	3 mg/kg	94.4	79.4	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	3 mg/kg	89.0	81.7	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	3 mg/kg	89.4	78.3	124
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	3 mg/kg	88.6	79.9	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	3 mg/kg	93.2	76.9	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	3 mg/kg	92.6	80.9	130
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	3 mg/kg	95.2	70.0	121
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	3 mg/kg	91.5	80.4	130
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	3 mg/kg	90.3	70.2	123
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	3 mg/kg	85.2	67.9	122
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	3 mg/kg	84.9	65.8	123
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	3 mg/kg	85.6	65.8	127
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4400516)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	1 mg/kg	111	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	1 mg/kg	102	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	1 mg/kg	104	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	1 mg/kg	102	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	1 mg/kg	100	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	1 mg/kg	103	72.4	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4400516) - continued								
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	1 mg/kg	98.4	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	2 mg/kg	100	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	2 mg/kg	86.5	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4400516)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	1 mg/kg	116	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	1 mg/kg	113	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	2 mg/kg	108	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	1 mg/kg	102	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	1 mg/kg	104	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	99.0	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	108	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	102	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	102	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	96.5	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4400516)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1 mg/kg	106	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1 mg/kg	106	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1 mg/kg	103	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	1 mg/kg	108	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1 mg/kg	108	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	1 mg/kg	107	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1 mg/kg	105	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	1 mg/kg	107	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1 mg/kg	109	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	1 mg/kg	111	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	2 mg/kg	113	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1 mg/kg	108	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1 mg/kg	108	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	1 mg/kg	107	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	1 mg/kg	106	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4400516)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	1 mg/kg	108	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	1 mg/kg	104	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	1 mg/kg	107	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	1 mg/kg	108	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	1 mg/kg	110	76.5	134

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4400516) - continued								
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	1 mg/kg	102	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	1 mg/kg	106	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	1 mg/kg	105	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	1 mg/kg	101	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	1 mg/kg	102	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	1 mg/kg	107	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	1 mg/kg	107	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	1 mg/kg	108	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	1 mg/kg	82.8	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	1 mg/kg	116	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	1 mg/kg	109	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	1 mg/kg	108	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	1 mg/kg	110	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	1 mg/kg	101	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	1 mg/kg	108	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400434)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	97.1	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400437)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	71.3	58.6	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400517)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	98.1	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	96.5	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	87.6	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	94.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400533)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	103	75.0	128
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	100	82.0	123
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	91.4	82.4	121
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	98.0	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4403549)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	93.4	58.6	131
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4403572)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	670 mg/kg	77.4	75.0	128
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	2860 mg/kg	92.3	82.0	123
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	1490 mg/kg	85.8	82.4	121
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	88.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400434)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	97.7	59.9	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400434) - continued								
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400437)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	76.1	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400517)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	92.9	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	97.0	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	96.5	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	96.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400533)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	102	77.0	130
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	103	81.5	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	99.6	73.3	137
EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	102	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4403549)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	45 mg/kg	91.3	59.3	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4403572)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	1000 mg/kg	83.6	77.0	130
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	3770 mg/kg	93.3	81.5	120
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	250 mg/kg	74.8	73.3	137
EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5020 mg/kg	90.6	70.0	130
EP080: BTEXN (QCLot: 4400437)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	83.6	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	90.3	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	90.3	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	93.9	64.8	134
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	95.2	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	91.8	61.8	123
EP080: BTEXN (QCLot: 4403549)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	100	61.6	117
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	93.6	65.8	125
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	90.2	65.8	124
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	88.2	64.8	134
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	92.4	68.7	132
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	102	61.8	123
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 4404347)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 4404347) - continued								
EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	0.1 mg/kg	64.3	54.4	128
EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	0.1 mg/kg	70.3	45.5	130
EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	0.1 mg/kg	61.9	51.7	135
EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	0.1 mg/kg	64.2	60.0	130
EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	0.1 mg/kg	64.5	56.8	131
EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	0.1 mg/kg	60.1	50.0	141
EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	0.1 mg/kg	72.6	68.5	131
EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	0.1 mg/kg	67.4	50.8	141
EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	0.1 mg/kg	63.0	40.8	126
EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	0.1 mg/kg	69.0	57.4	139
EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	0.1 mg/kg	56.7	38.9	137
EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	0.1 mg/kg	63.1	48.7	129
EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	0.1 mg/kg	63.0	49.4	106
EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	0.1 mg/kg	66.7	53.2	128
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 4414289)								
EP202: 4-Chlorophenoxy acetic acid	122-88-3	0.02	mg/kg	<0.02	0.1 mg/kg	76.7	54.4	128
EP202: 2.4-DB	94-82-6	0.02	mg/kg	<0.02	0.1 mg/kg	69.1	45.5	130
EP202: Dicamba	1918-00-9	0.02	mg/kg	<0.02	0.1 mg/kg	78.5	51.7	135
EP202: Mecoprop	93-65-2	0.02	mg/kg	<0.02	0.1 mg/kg	73.4	60.0	130
EP202: MCPA	94-74-6	0.02	mg/kg	<0.02	0.1 mg/kg	74.8	56.8	131
EP202: 2.4-DP	120-36-5	0.02	mg/kg	<0.02	0.1 mg/kg	79.2	50.0	141
EP202: 2.4-D	94-75-7	0.02	mg/kg	<0.02	0.1 mg/kg	86.1	68.5	131
EP202: Triclopyr	55335-06-3	0.02	mg/kg	<0.02	0.1 mg/kg	81.0	50.8	141
EP202: 2.4.5-TP (Silvex)	93-72-1	0.02	mg/kg	<0.02	0.1 mg/kg	78.1	40.8	126
EP202: 2.4.5-T	93-76-5	0.02	mg/kg	<0.02	0.1 mg/kg	81.8	57.4	139
EP202: MCPB	94-81-5	0.02	mg/kg	<0.02	0.1 mg/kg	78.3	38.9	137
EP202: Picloram	1918-02-1	0.02	mg/kg	<0.02	0.1 mg/kg	62.4	48.7	129
EP202: Clopyralid	1702-17-6	0.02	mg/kg	<0.02	0.1 mg/kg	68.7	49.4	106
EP202: Fluroxypyr	69377-81-7	0.02	mg/kg	<0.02	0.1 mg/kg	80.4	53.2	128

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 4396945)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	104	89.2	115
EG020A-T: Beryllium	7440-41-7	0.001	mg/L	<0.001	0.1 mg/L	103	86.0	115
EG020A-T: Barium	7440-39-3	0.001	mg/L	<0.001	0.1 mg/L	103	87.2	117
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	96.1	86.4	115
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	104	86.9	112

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4396945) - continued								
EG020A-T: Cobalt	7440-48-4	0.001	mg/L	<0.001	0.1 mg/L	102	87.7	113
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	100	86.9	111
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	102	88.3	112
EG020A-T: Manganese	7439-96-5	0.001	mg/L	<0.001	0.1 mg/L	104	88.7	113
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	101	87.9	113
EG020A-T: Selenium	7782-49-2	0.01	mg/L	<0.01	0.1 mg/L	101	84.8	116
EG020A-T: Vanadium	7440-62-2	0.01	mg/L	<0.01	0.1 mg/L	106	87.1	114
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	106	86.7	117
EG020A-T: Boron	7440-42-8	0.05	mg/L	<0.05	0.5 mg/L	111	89.3	118
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4398048)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	113	73.4	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4394056)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	94.6	66.2	134
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4396484)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	4000 µg/L	76.2	47.2	122
EP071: C15 - C28 Fraction	----	100	µg/L	<100	16900 µg/L	87.2	52.9	131
EP071: C29 - C36 Fraction	----	50	µg/L	<50	8090 µg/L	90.8	50.4	127
EP071: C10 - C36 Fraction (sum)	----	50	µg/L	<50	28990 µg/L	86.5	51.5	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4394056)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	450 µg/L	94.9	66.2	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4396484)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	5830 µg/L	84.8	49.1	125
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	21700 µg/L	92.8	51.6	128
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1560 µg/L	81.1	47.2	130
EP071: >C10 - C40 Fraction (sum)	----	100	µg/L	<100	29090 µg/L	90.4	51.2	127
EP080: BTEXN (QCLot: 4394056)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	97.7	68.8	127
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	106	72.9	129
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	103	71.7	130
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	99.6	72.3	136
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	103	75.9	134
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	105	68.3	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4400651)							
EM2211035-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	96.8	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.6	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	104	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	101	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	96.9	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	107	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	93.9	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4400652)							
EM2211061-016	BH06 - 0.1	EG005T: Arsenic	7440-38-2	50 mg/kg	99.2	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	92.7	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	91.3	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	99.9	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	95.3	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	101	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	104	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4400650)							
EM2211035-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	102	76.0	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4400653)							
EM2211061-016	BH06 - 0.1	EG035T: Mercury	7439-97-6	0.5 mg/kg	96.4	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4400826)							
EM2210946-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	65.6	58.0	114
EM2210946-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	75.8	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4403123)							
EM2210714-001	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	87.5	70.0	130
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser (QCLot: 4403126)							
EM2211061-019	BH07 - 0.1	EK028SF: Weak Acid Dissociable Cyanide	----	20 mg/kg	100	70.0	130
EK040T: Fluoride Total (QCLot: 4400820)							
EM2211035-001	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	112	70.0	130
EP004: Organic Matter (QCLot: 4405872)							
EM2210942-003	Anonymous	EP004: Organic Matter	----	1.79 %	82.7	70.0	120
		EP004: Total Organic Carbon	----	1.04 %	82.6	70.0	120
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4400518)							
EM2211058-008	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	107	59.6	152
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4400532)							
EM2211061-019	BH07 - 0.1	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	81.4	63.2	144

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4400531)							
EM2211061-019	BH07 - 0.1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	81.2	51.4	139
		EP068: Heptachlor	76-44-8	0.5 mg/kg	67.8	49.1	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	81.0	38.4	135
		EP068: Dieldrin	60-57-1	0.5 mg/kg	83.0	58.4	136
		EP068: Endrin	72-20-8	0.5 mg/kg	75.1	33.0	146
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	81.2	20.0	133
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4400531)							
EM2211061-019	BH07 - 0.1	EP068: Diazinon	333-41-5	0.5 mg/kg	92.5	65.1	135
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	78.8	56.3	127
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	75.5	55.0	133
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	75.1	55.1	133
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	68.3	43.8	128
EP069: Toxaphene (QCLot: 4400534)							
EM2211061-033	BH09 - 0.1	EP069: Toxaphene	8001-35-2	10 mg/kg	128	54.2	138
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4400434)							
EM2211035-001	Anonymous	EP074-UT: Benzene	71-43-2	2 mg/kg	88.2	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	91.6	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4400434)							
EM2211035-001	Anonymous	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	83.3	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	78.7	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	81.3	55.5	122
EP075(SIM)A: Phenolic Compounds (QCLot: 4400535)							
EM2211061-004	BH02 - 0.1	EP075(SIM): Phenol	108-95-2	1.5 mg/kg	100.0	77.1	119
		EP075(SIM): 2-Chlorophenol	95-57-8	1.5 mg/kg	104	78.9	123
		EP075(SIM): 2-Nitrophenol	88-75-5	1.5 mg/kg	96.0	43.8	136
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	1.5 mg/kg	85.4	61.5	120
		EP075(SIM): Pentachlorophenol	87-86-5	1.5 mg/kg	53.7	15.3	139
EP075(SIM)A: Phenolic Compounds (QCLot: 4403571)							
EM2211061-031	BH09 - 0.5	EP075(SIM): Phenol	108-95-2	3 mg/kg	95.1	77.1	119
		EP075(SIM): 2-Chlorophenol	95-57-8	3 mg/kg	92.3	78.9	123
		EP075(SIM): 2-Nitrophenol	88-75-5	3 mg/kg	86.2	43.8	136
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	89.7	61.5	120
		EP075(SIM): Pentachlorophenol	87-86-5	3 mg/kg	58.0	15.3	139
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4400535)							
EM2211061-004	BH02 - 0.1	EP075(SIM): Acenaphthene	83-32-9	1.5 mg/kg	99.6	77.2	116
		EP075(SIM): Pyrene	129-00-0	1.5 mg/kg	105	65.5	136

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4403571)							
EM2211061-031	BH09 - 0.5	EP075(SIM): Acenaphthene	83-32-9	3 mg/kg	91.6	77.2	116
		EP075(SIM): Pyrene	129-00-0	3 mg/kg	91.6	65.5	136
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4400516)							
EM2211035-012	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	1.5 mg/kg	102	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	1.5 mg/kg	97.9	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	1.5 mg/kg	84.9	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4400516)							
EM2211035-012	Anonymous	EP075-EM: Phenol	108-95-2	1.5 mg/kg	110	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	1.5 mg/kg	97.2	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4400516)							
EM2211035-012	Anonymous	EP075-EM: Acenaphthene	83-32-9	1.5 mg/kg	94.6	42.6	138
		EP075-EM: Pyrene	129-00-0	1.5 mg/kg	# Not Determined	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400434)							
EM2211035-001	Anonymous	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	88.4	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400437)							
EM2211061-004	BH02 - 0.1	EP080: C6 - C9 Fraction	----	28 mg/kg	69.7	33.4	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400517)							
EM2211058-006	Anonymous	EP071-EM: C10 - C14 Fraction	----	670 mg/kg	104	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2860 mg/kg	100	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1490 mg/kg	91.9	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5020 mg/kg	98.7	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4400533)							
EM2211061-007	BH03 - 0.1	EP071: C10 - C14 Fraction	----	670 mg/kg	111	71.2	125
		EP071: C15 - C28 Fraction	----	2860 mg/kg	107	75.6	122
		EP071: C29 - C36 Fraction	----	1490 mg/kg	97.4	78.0	120
		EP071: C10 - C36 Fraction (sum)	----	5020 mg/kg	105	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4403549)							
EM2211061-026	SP07	EP080: C6 - C9 Fraction	----	28 mg/kg	78.6	33.4	124
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400434)							
EM2211035-001	Anonymous	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	84.6	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400437)							
EM2211061-004	BH02 - 0.1	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	64.7	30.8	120
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400517)							
EM2211058-006	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1000 mg/kg	97.2	71.5	130

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400517) - continued							
EM2211058-006	Anonymous	EP071-EM: >C16 - C34 Fraction	----	3770 mg/kg	101	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	250 mg/kg	106	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5020 mg/kg	101	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4400533)							
EM2211061-007	BH03 - 0.1	EP071: >C10 - C16 Fraction	----	1000 mg/kg	110	72.2	128
		EP071: >C16 - C34 Fraction	----	3770 mg/kg	110	76.5	119
		EP071: >C34 - C40 Fraction	----	250 mg/kg	107	66.8	138
		EP071: >C10 - C40 Fraction (sum)	----	5020 mg/kg	109	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4403549)							
EM2211061-026	SP07	EP080: C6 - C10 Fraction	C6_C10	33 mg/kg	64.0	30.8	120
EP080: BTEXN (QCLot: 4400437)							
EM2211061-004	BH02 - 0.1	EP080: Benzene	71-43-2	2 mg/kg	101	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	106	57.1	131
EP080: BTEXN (QCLot: 4403549)							
EM2211061-026	SP07	EP080: Benzene	71-43-2	2 mg/kg	96.7	54.4	127
		EP080: Toluene	108-88-3	2 mg/kg	93.2	57.1	131
EP202A: Phenoxyacetic Acid Herbicides by LCMS (QCLot: 4404347)							
EM2210264-004	Anonymous	EP202: Mecoprop	93-65-2	0.1 mg/kg	63.1	60.0	140
		EP202: MCPA	94-74-6	0.1 mg/kg	70.2	57.0	143
		EP202: 2.4-D	94-75-7	0.1 mg/kg	70.8	68.0	139
		EP202: Triclopyr	55335-06-3	0.1 mg/kg	70.2	51.0	145
		EP202: 2.4.5-T	93-76-5	0.1 mg/kg	68.1	57.0	142
		EP202: Picloram	1918-02-1	0.1 mg/kg	# 39.1	49.0	138
		EP202: Clopyralid	1702-17-6	0.1 mg/kg	# 20.6	49.0	149

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 4396945)							
EM2210986-003	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	93.7	82.0	123
		EG020A-T: Beryllium	7440-41-7	1 mg/L	96.5	79.0	126
		EG020A-T: Barium	7440-39-3	1 mg/L	99.0	80.0	120
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	93.2	81.8	123
		EG020A-T: Chromium	7440-47-3	1 mg/L	92.9	78.9	119
		EG020A-T: Cobalt	7440-48-4	1 mg/L	92.8	80.7	121
		EG020A-T: Copper	7440-50-8	1 mg/L	96.0	80.4	118
		EG020A-T: Lead	7439-92-1	1 mg/L	98.9	80.5	121
		EG020A-T: Manganese	7439-96-5	1 mg/L	101	73.0	123

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG020T: Total Metals by ICP-MS (QCLot: 4396945) - continued							
EM2210986-003	Anonymous	EG020A-T: Nickel	7440-02-0	1 mg/L	99.4	80.0	118
		EG020A-T: Vanadium	7440-62-2	1 mg/L	92.2	81.0	119
		EG020A-T: Zinc	7440-66-6	1 mg/L	98.0	74.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4398048)							
EM2210889-003	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	103	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4394056)							
EM2210659-011	Anonymous	EP080: C6 - C9 Fraction	----	280 µg/L	91.1	33.9	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4394056)							
EM2210659-011	Anonymous	EP080: C6 - C10 Fraction	C6_C10	330 µg/L	77.6	34.0	122
EP080: BTEXN (QCLot: 4394056)							
EM2210659-011	Anonymous	EP080: Benzene	71-43-2	20 µg/L	102	56.3	133
		EP080: Toluene	108-88-3	20 µg/L	110	60.4	132

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: EDGE GROUP
ADDRESS / OFFICE: 423 CITY RD SOUTH MELBOURNE
PROJECT MANAGER (PM): Natasha Dun
PROJECT ID: 20220134
SITE: Hopetoun Park P.O. NO.:
RESULTS REQUIRED (Date): QUOTE NO.: MEBQ 108 - 20

SAMPLER: GM ED
MOBILE: 0409 106 107
PHONE
EMAIL REPORT TO: natasha.dun@edgegroup.net.au; garry.masur@edgegroup.net.au
EMAIL INVOICE TO: accounts@edgegroup.net.au

Australian Laboratory Services Pty Ltd
2-4 Westall Road, Springvale, VIC 3171

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

FOR LABORATORY USE ONLY
COOLER SEAL (circle appropriate)
Intact: Yes No N/A
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes: e.g. Highly contaminated samples e.g. "High PAHs expected". Extra volume for QC or trace LORs etc.

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RELINQUISHED BY
BN CALS
14/6/22 Bam

SAMPLE INFORMATION (note: S = Soil, W=Water) | CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	P21/2 NEPM HIL A Screen with herbicides	P22 NEPM EIL Site Classification	EPA 1828.2 Screen	S-26 + S-12 8 metals TRH BTEXN PAH OPP OCP	Phenols	S-5 8 metals TRH BTEXN	S26 TRH (C6-C40) / BTEXN / PAH / 8 Metals	S3 15 metals	TRH BTEXN				HOLD
30	BH08-0.1	S	9/6/2022			2				X									
31	BH08-0.5	S	9/6/2022			2		X				X							
32	BH08-1.0	S	9/6/2022			1													
33	BH09-0.1	S	9/6/2022			2	X												
34	BH09-0.5	S	9/6/2022			1						X							
35	BH09-1.0	S	9/6/2022			1													
36	BH10-0.1	S	9/6/2022			2				x									
37	BH10-0.5	S	9/6/2022			1						X							
38	BH10-1.0	S	9/6/2022			1													
39	BH11-0.1	S	9/6/2022			2	X												
40	BH11-0.5	S	9/6/2022			1						x							
41	BH1-1.0	S	9/6/2022			1													
42	BH12-0.1	S	9/6/2022			2					x	x							
43	BH12-0.5	S	9/6/2022			1						x							
44	BH12-1.0	S	9/6/2022			1													
45	FDO1	S	9/6/2022			1								X					
(1)	— FS01 —	S	9/6/2022			1								X			—	--	
46	RINS01	S	9/6/2022			1								X					
47	TRIP01	S	9/6/2022			1									X				

Send to Enviolab for analysis: please!! U. (FSO1)

Envirolab Services
25 Research Drive
Croydon South VIC 3136
Ph: (03) 9763 2500

Job No: 31939
Date Received 14/6/22
Time Received 1:05pm
Received By: IA
Temp: Cool/Ambient 1.4°C
Cooling: Ice/Ice pack
Security: Intact/Broken/None

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date: 9/6/22	Name:	Date:	Con' Note No:
Of:	Time: 10:00pm	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

48. BH07-0.8 S 9/6/22 — Extra Sample
49. BH07-1.0 S 9/6/22

Envirolab Services Pty Ltd
ABN 37 112 535 645 - 002
25 Research Drive Croydon South VIC 3136
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CERTIFICATE OF ANALYSIS 31939

Client Details

Client	Edge Group Pty Ltd
Attention	Natasha Dun
Address	Level 1, 423 City Road, South Melbourne, VIC, 3205

Sample Details

Your Reference	**20220134**
Number of Samples	1 Soil
Date samples received	14/06/2022
Date completed instructions received	14/06/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	20/06/2022
Date of Issue	17/06/2022

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Chris De Luca, Operations Manager

Authorised By

Pamela Adams, Laboratory Manager

17 metals in soil		
Our Reference		31939-1
Your Reference	UNITS	FS01
Date Sampled		09/06/2022
Type of sample		Soil
Date digested	-	16/06/2022
Date analysed	-	16/06/2022
Arsenic	mg/kg	<4
Boron	mg/kg	7
Barium	mg/kg	40
Beryllium	mg/kg	<1
Cadmium	mg/kg	<0.4
Chromium	mg/kg	17
Cobalt	mg/kg	18
Copper	mg/kg	19
Manganese	mg/kg	340
Nickel	mg/kg	68
Lead	mg/kg	9
Selenium	mg/kg	<2
Vanadium	mg/kg	22
Zinc	mg/kg	48
Mercury	mg/kg	<0.1

Moisture		
Our Reference		31939-1
Your Reference	UNITS	FS01
Date Sampled		09/06/2022
Type of sample		Soil
Date prepared	-	15/06/2022
Date analysed	-	16/06/2022
Moisture	%	7.6

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105°C for a minimum of 12 hours.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.

QUALITY CONTROL: 17 metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date digested	-			16/06/2022	[NT]	[NT]	[NT]	[NT]	16/06/2022	[NT]
Date analysed	-			16/06/2022	[NT]	[NT]	[NT]	[NT]	16/06/2022	[NT]
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	[NT]	[NT]	[NT]	[NT]	107	[NT]
Boron	mg/kg	3	Metals-020 ICP-AES	<3	[NT]	[NT]	[NT]	[NT]	106	[NT]
Barium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Beryllium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	[NT]	[NT]	[NT]	[NT]	107	[NT]
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Cobalt	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Copper	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Manganese	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Lead	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Selenium	mg/kg	2	Metals-020 ICP-AES	<2	[NT]	[NT]	[NT]	[NT]	103	[NT]
Vanadium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	[NT]	[NT]	[NT]	[NT]	95	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Envirolab Services Pty Ltd
ABN 37 112 535 645 - 002
25 Research Drive Croydon South VIC 3136
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DATA QUALITY ASSESSMENT SUMMARY

Report Details

Envirolab Report Reference	**31939**
Client ID	Edge Group Pty Ltd
Project Reference	20220134
Date Issued	17/06/2022

QC DATA

All laboratory QC data was within the Envirolab Group's specifications.

HOLDING TIME COMPLIANCE EVALUATION

All preservation / holding times (based on AS/ASPHA/ISO/NEPM/USEPA reference documents and standards) are compliant.

Certain analyses have had their recommended technical holding times elongated by filtering and/or freezing on receipt at the laboratory (e.g. BOD, chlorophyll/Pheophytin, nutrients and acid sulphate soil tests).

COMPLIANCE TO QC FREQUENCY (NEPM)

Internal laboratory QC rate complies with NEPM requirements (LCS/MB/MS 1 in 20, Duplicates 1 in 10 samples). Note, samples are batched together with other sample consignments in order to assign QC sample frequency.

QC Evaluation

Duplicate(s) was performed as per NEPM frequency	✓
Laboratory Control Sample(s) were analysed with the samples received	✓
A Method Blank was performed with the samples received	✓
Matrix spike(s) was performed as per NEPM frequency (Not Applicable for Air samples)	✓

Refer to Certificate of Analysis for all Quality Control data.