

s53X Environmental Audit Report. 1136- 1138 Nepean Hwy, Highett. Stage 2A, CARMS Reference 37308-3

Department of Treasury and Finance

07 December 2021

→ **The Power of Commitment**



ENVIRONMENT PROTECTION ACT 1970**Statement of Environmental Audit**

I, John Throssell of GHD Pty Ltd 180 Lonsdale Street, Melbourne, a person appointed by the Environment Protection Authority ('the Authority') under the *Environment Protection Act 1970* ('the Act') as an environmental auditor for the purposes of the Act, having:

1. been requested by Mr Adam Bradley of Victorian Department of Treasury and Finance to issue a certificate of environmental audit in relation to Stage 2A of the site located at 1136-1138 Nepean Highway, Highett 3190, located in the City of Kingston, comprising the land defined by the Certificate of Title Volume 9598 Folio 389, Allotment 2026, Parish of Moorabbin, owned by Department of Treasury and Finance and currently vacant.
2. had regard to, amongst other things,
 - i. guidelines issued by the Authority for the purposes of Part IXD of the Act,
 - ii. the beneficial uses that may be made of the site, and
 - iii. relevant State environment protection policies/industrial waste management policies, namely: State environment protection policy (Prevention and Management of Contamination of Land) 2002, State environment protection policy (Waters) 2018, Industrial Waste Management Policy (Prescribed Industrial Waste) 2000, Industrial Waste Management Policy (Waste Acid Sulphate Soils) 1999, State environment protection policy (Air Quality Management) 2001 and State environment protection policy (Ambient Air Quality) 1999.

in making a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment that may be caused to, any beneficial use made of the site by any industrial processes or activity, waste or substance (including any chemical substance), and

3. completed an environmental audit report in accordance with section 53X of the Act, a copy of which has been sent to the Authority and the relevant planning and responsible authority.

HEREBY STATE that I am of the opinion that:

The site is suitable for the beneficial uses associated with

Sensitive use (High density: residential use, a childcare centre, pre-school or primary school);

Recreation/Open space;

Commercial;

Industrial);

use of the land,

subject to the following conditions attached thereto:

- Condition 1 This statement is directly referable to and based upon the layout and construction of the development shown and described in the attached *Masterplan: Apartment and Townhouse Scheme 1136-1147 Nepean Highway Highett Gasworks, 14/02/2020*. Any substantive change(s) i.e. coverage of paved area, building footprint, introduction of basements, must be verified by an environmental auditor appointed under Division 1 of Part 8.3 of the Environment Protection Act 2017, and this verification advised in writing to EPA and the planning authority.
- Condition 2 Groundwater at the site is polluted and is not suitable for the use of; water dependent ecosystems and species; potable water supply; agriculture and irrigation (irrigation and stock watering); water-based recreation (primary contact recreation); Traditional Owner cultural values; Cultural and spiritual values; buildings and structures. Groundwater must not be used for any precluded beneficial use without prior testing and review of results by a suitably qualified professional to confirm its suitability for the proposed use. It may be extracted for the purpose of environmental monitoring or remediation.
- Condition 3 There are no basements included in the proposed development plans for the site. The site is not suitable for a basement without further assessment and the potential design and installation of mitigation measures to manage vapour and odour risks. If a basement (single or multilevel) is incorporated in the development of the site, an environmental auditor Division 1 of Part 8.3 of the Environment Protection Act 2017 ("the Act") must be engaged to conduct an environmental audit under Division 3 of Part 8.3 of the of the Act, to consider this use.
- Condition 4 A Construction Environmental Management Plan must be developed for the site by a suitably qualified professional and verified by an environmental auditor appointed under Division 1 of Part 8.3 of the Environment Protection Act 2017, and this verification advised in writing to EPA and the planning authority.
- Condition 5 Prior to the commencement of site construction, the owner of the site must implement and maintain a Construction Environmental Management Plan required by condition 4 of this statement.
- Condition 6 The existing Site Environmental Management Plan (Stages 2 and 2A) must be revised by a suitably qualified professional to reflect current site conditions and verified by an environmental auditor appointed under Division 1 of Part 8.3 of the Environment Protection Act 2017, and this verification advised in writing to EPA and the planning authority.
- Condition 7 Prior to site occupation, the owner of the site must implement and maintain the revised Site Environmental Management Plan required by condition 6 of this statement.

The condition of the site is detrimental or potentially detrimental to any (one or more) beneficial uses of the site. Accordingly, I have not issued a Certificate of Environmental Audit for the site in its current condition, the reasons for which are presented in the environmental audit report. The terms and conditions that need to be complied with before a Certificate of Environmental Audit may be issued are set out as follows:

Removal of all residual soil impacts at the site

Restoration of all relevant beneficial uses of groundwater

Other related information:

The 2010 determination by EPA (CARMS 37308-2) that the former Highett Gasworks Site (Stages 2 and 2A) has been cleaned up to the extent practicable (CUTEP), and that Stages 2 and 2A are a groundwater quality restricted use zone (GQRUZ) remain valid.

Groundwater at the site is polluted with cyanide, ammonia, sulphate, metals, TRH, PAHs (including BTEX), phenols and MAHs and is not suitable for the beneficial uses of water dependent ecosystems and species; potable water supply; agriculture and irrigation (irrigation and stock watering); water-based recreation (primary contact recreation); Traditional Owner cultural values; Cultural and spiritual values; buildings and structures. The groundwater is suitable for the beneficial uses of industrial and commercial.

In accordance with clause 19(3) of SEPP (Groundwaters of Victoria), the Authority may require periodic reassessment of the practicability of groundwater clean up.

Groundwater at the site contains elevated concentrations of metals (arsenic, nickel and zinc) and nitrate. The concentrations are considered to be associated with off-site regional sources of pollution. The pollution is not sourced from the site.

Some soil and groundwater may contain odours at some locations on the site. This material is not considered to represent a health or ecological risk but may cause a noticeable odour if exposed during excavation works, development or occupation of the site.

No further groundwater monitoring across Stages 2 and 2A is considered necessary. The remaining groundwater impacts are considered to be stable or declining, and are adequately managed by the GQRUZ.

Groundwater monitoring bores present at the site and installed off-site should be decommissioned within 12 months of cessation of use in accordance with the requirements of "Minimum Construction Requirements for Water Bores in Australia", published by the Land and Water Biodiversity Committee (4th edition).

This statement of Environmental Audit (SoEA) supersedes the SoEA issued by John Throssell of Parsons Brinckerhoff which was provided in the Audit report titled Stages 2 and 2A 1136-1138 Nepean Highway Highett 3190 Victoria CARMS 37308-2. Ref 2125064A-A and dated 15 December 2011.

This Statement forms part of the Environmental Audit Report: 1136-1138 Nepean Hwy, Highett. Stage 2A, prepared for the Department of Treasury and Finance. *CARMS Reference 37308-3*, (December, 2021). Further details regarding the condition of the site may be found in the Environmental Audit Report.

DATED: 07 December 2021

SIGNED: 

MR JOHN THROSSELL

ENVIRONMENTAL AUDITOR

(Appointed Pursuant to the *Environment Protection Act 1970*)

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CROWN FOLIO STATEMENT

Page 1 of 1

VOLUME 11757 FOLIO 536
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CROWN FOLIO

LAND DESCRIPTION

Crown Allotment 2026 Parish of Moorabbin.
PARENT TITLE Volume 11703 Folio 299
Created by instrument MI156380G 06/08/2016

CROWN LAND ADMINISTRATOR

DEPARTMENT OF TREASURY AND FINANCE
MI156380G 06/08/2016

STATUS, ENCUMBRANCES AND NOTICES

DIAGRAM LOCATION

SEE CD061631C FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF CROWN FOLIO STATEMENT-----

Additional information: (not part of the Crown Folio Statement)

Street Address: VIEW STREET HIGHETT VIC 3190

DOCUMENT END



Imaged Document Cover Sheet

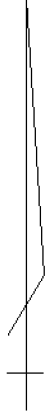
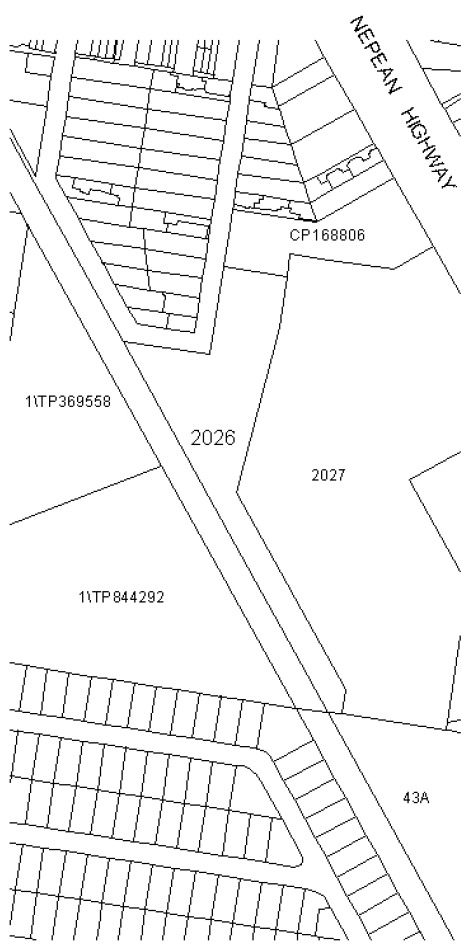
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Document Type	Plan
Document Identification	CD061631C
Number of Pages (excluding this cover sheet)	1
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CROWN DIAGRAM	CD061631C
Location of Land Parish : MOORABBIN Allotment : 2026	This plan has been created to assist in locating a Crown Land parcel Warning - No warranty is given as to the accuracy or completeness of this plan Any derived dimensions are approximate
Standard Parcel Identifier (SPI) : 2026\PP3163 Vicmap Parcel PFI : 219533681	Coordinate Position MGA : 328240, 5797660 (55) Melways Directory Reference : 77 F10 (ed. 38)
Compiled from VICMAP cadastral mapping data Date: 09/05/2012 QJ   The diagram shows a section of land with several parcels. A road, labeled 'NEPEAN HIGHWAY', runs diagonally from the top right towards the bottom. To the left of the highway, there are several rectangular parcels, some of which are shaded with a grid pattern. One parcel is labeled '11TP369558'. Another parcel, labeled '2026', is situated between the highway and a larger parcel labeled '11TP844292'. To the right of the highway, there is a large parcel labeled '2027'. Further to the right, another parcel is labeled 'CP168806'. At the bottom right, a small area is labeled '43A'.	
SCALE 0 100 200 300 400 500 METRES	Sheet 1 of 1 Sheets



Source: Reproduced Figure 1 of Senversa Remediation and Validation 2021



Department of Treasury and Finance
s53X Stage 2A
Former Highett Gasworks

Project No. 3137121
Revision No. A
Date 30 Nov 2021

Audit Boundary

FIGURE 1

Executive summary

Table 1 *Summary of Audit Information*

Summary information required	
Auditor	Mr John Throssell
Auditor account number	75645
Auditor appointment end date	07/08/2024
Audit type	S53X
Date EPA notified of audit	25/03/2019
Audit service order number	8006101 (CARMS No. 37308-3)
Name of person requesting audit	Department of Treasury and Finance
Relationship of person requesting audit to site	Site manager
Name of premises owner	Development Victoria
Date of auditor engagement	18/03/2019
Completion date of the audit	07/12/2021
Reason for audit	Environmental audit overlay
Audit Categorisation	Risk
Environmental segments	Land, Groundwater, Air, Surface Water
If an audit was required by an EPA notice, licence or other, please provide EPA reference number	
Current land use zoning	Residential Growth Zone – Schedule 2 (RGZ2) under the Kingston City Council Planning Scheme
EPA region	Southern Metropolitan
Municipality	Kingston City Council
Dominant – Lot on plan	Certificate of Title Volume 9598 Folio 389. Plan of Consolidation No. 150995, Parish of Moorabbin.
Additional – Lot on plan	Crown Allotment 2026 Parish of Moorabbin. SPI:2026\PP3163
Site/premises name	Former Highett Gasworks
Building / complex sub-unit No.	
Street/Lot – Lower No.	1136
Street/Lot – Upper No.	1138
Street Name	Nepean
Street type (road, court, etc.)	Highway
Street suffix (North, South etc.)	
Suburb	Highett
Postcode	3190
GIS coordinate of site centroid	GDA94 – Longitude / Latitude in decimal degrees
Latitude (GDA94)	37.952067
Longitude (GDA94)	145.045068
Site area (m ²)	14,220
Plan of site/premises showing audit boundary attached	Refer to Figure 1

Summary information required		
Members and categories of support team utilised	Eric Friebe (human health risk assessment)	
Further works or requirements	Development and implementation of Construction Environmental Management Plan for site development works. Revision and implementation of the existing Site Environmental Management Plan (post construction and development).	
Nature and extent of continuing risk	Residual soil impacts require ongoing management. Groundwater not suitable for extractive uses. Further groundwater monitoring not required.	
Outcome of the audit	Statement of Environmental Audit	
Has EPA determined CUTEF at the site?	Yes (2011)	
Has the Auditor determined CUTEF at this site?	No	
Has a GQRUZ been identified at the site / beyond the site by EPA?	Yes, the site (Stage 2A) and Stage 2 is a GQRUZ	
Does NAPL remain at the site?	No	
Please indicate which of the protected beneficial of groundwater are precluded due to pollution	Protected Use Water dependent ecosystems and species Potable water supply (desirable) Potable mineral water supply Agriculture and irrigation (irrigation) Agriculture and irrigation (stock watering) Industrial and commercial water use Water-based recreation 3(primary contact recreation) Traditional Owner cultural values Cultural and spiritual values Buildings and structures Geothermal properties	Precluded? Yes Yes Not relevant Yes Yes No Yes Yes Yes Yes Not relevant

Table 2 Physical Site Information

Summary information required	
Historical land use	Gasworks, training centre
Current land use	Vacant land. A live gas main runs along the western boundary of the site.
Proposed future land use	Residential (medium and high density) and open space
Surrounding land use - north	Residential and commercial
Surrounding land use - south	Public park, recreation (Sir William Fry Reserve)
Surrounding land use - east	Vacant land (Stage 2), Moorabbin Magistrates Court, residential and commercial, Nepean Highway,
Surrounding land use - west	Frankston Railway Line, Lyle Anderson Reserve, Highett Bowls Club and residential
Proposed land use zoning	RG22 (Residential Growth)
Nearest surface water receptor - name	Port Phillip Bay
Nearest surface water receptor - direction	West
Likely point of groundwater discharge	Port Phillip Bay
Site aquifer formation	Brighton Group
Groundwater flow direction	West to southwest
Groundwater TDS range	172 to 4,796 mg/L in November 2018
Groundwater segment	A2

Summary information required	
Are multiple aquifers impacted by the pollution at the site?	No
Perched groundwater depth – upper (mbgl)	-
Perched groundwater depth – lower (mbgl)	-
Regional groundwater depth – upper (mbgl)	4.656
Regional groundwater depth – lower (mbgl)	10.335
Number of bores within 2km	368
Closest extractive use (distance in m)	300 m (115041, registered for irrigation use)
Zone of groundwater plume influence (m from site boundary)	Potential impacts below rail easement
Year groundwater was last monitored	November 2018
Have you attached electronic copies of current groundwater analytical results presented as a summary table?	Refer Appendix F

This Executive Summary presents a brief summary of information described in the environmental audit report. The Executive Summary should be read in conjunction with the full environmental audit report 1136-1138 Nepean Hwy, Highett. Stage 2A, prepared for the Department of Treasury and Finance. *CARMS Reference 37308-3*, (December, 2021), and interpreted in the context of the more detailed information presented in the body of the environmental audit report, the purpose and scope of the environmental audit and the disclaimers/limitations discussed in Section 1.6 of the environmental audit report.

