Douglas Partners
Geotechnics / Environment / Groundwater

Integrated Practical Solutions

Report on Environmental Audit
101-105 Hope Street
Brunswick

EPA CARMS No: 71810-1

Proposed : 8 January 2013

Prepared for
Roden Street Pty Ltd

Project : 78938.00
30 July 2013

Douglas Partners
Geotechnics / Environment / Groundwater

Document History

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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

	Signature	Date
Author	Environmental Auditor (appointed pursuant to Part IXD of the *Environment Protection Act* 1970)	30 July 2013
Reviewer		

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Executive Summary

Table E1 : Summary of Audit Information

EPA file reference no.	71810-1
Auditor	Paul Moritz
Auditor term of appointment	26 November 2011 – 25 November 2013
Name of person requesting Audit	Mr Joe Di Monte
Relationship to premises/location	Principal of Site Owner
Date of Request	6 February 2013
Date EPA notified of Audit	7 February 2013
Completion date of Audit	30 July 2013
Reason for Audit	Planning Permit Condition
Current land use zoning	MUZ
EPA region	Metro
Municipality	Moreland
Dominant - Lot on plan	Lot 1, PS 626893Q Originally notified to EPA as Lot 2 LP89346
Additional — Lot on plan(s)	-
Site/premises name	-
Building/complex sub-unit No	-
Street/Lot — Lower No	101
Street/Lot — Upper No.	105
Street Name	Hope
Street type (road, court, etc)	Street
Street suffix (North, South etc)	-
Suburb	Brunswick
Postcode	3056
GIS coordinate of site centroid Longitude/Northing (*GDA94*) Latitude/Easting (*GDA94*)	 S -37.763580759189 E 144.95471
Site area (hectares)	0.12
Members and categories of support team utilised	None
Outcome of the Audit	Certificate of Environmental Audit
Further work or requirements	None
Nature and extent of continuing risk	No unacceptable risk

Table E2 : Physical Site Information

Site aquifer formation	Newer Volcanic
Average depth to groundwater	Groundwater not directly assessed
Groundwater segment	Assumed to be B
Groundwater flow direction	Assumed to be southerly to south-westerly
Past use/site history	Commercial and industrial. Timber mouldings and metal fabrication.
Surrounding land use	Largely residential, with warehousing to the south.
Proposed future use	Mixed use – commercial offices and medium density development.

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Report on Environmental Audit
101 – 105 Hope Street
Brunswick

1. Introduction

This Environmental Audit Report has been prepared by Paul Moritz of Douglas Partners Pty Ltd ('DP'). Dr Moritz is an Environmental Auditor (appointed pursuant to the *Environment Protection Act* 1970 – 'the Act') in the category of Contaminated Land. He was initially appointed as an Environmental Auditor on 15 September 2009 and is currently appointed from 25 November 2011 - 24 November 2013.

The Victorian Environment Protection Authority (EPA Victoria) was formally advised of the intended Audit on 7 February 2013, following the initial request on 6 February 2013 from Mr Joe Di Monte of Roden Street Pty Ltd. Diomides & Associates ('Diomides') conducted the environmental assessment work for the site.

As required under the Act, an Environmental Audit Report shall include the following:

- An evaluation of the environmental quality of the relevant segment of the environment;
- An assessment whether any clean-up is required to that segment of the environment; and
- If any clean-up is necessary, any recommendations relating to the carrying out of the clean-up.

When evaluating the above matters, the Auditor must have regard to the following:

- Any relevant Regulations, State Environment Protection Policy or Industrial Waste Management Policy;
- Any guidelines issued by the EPA Victoria for the purposes of the Act; and
- The *National Environmental Protection (Assessment of Site Contamination) Measure* 1999.

Depending on the outcome of the Environmental Audit process, the Auditor is then required to issue a Certificate of Environmental Audit, or if it is believed that the site is detrimental or potentially detrimental to one or more beneficial uses of the site, issue a Statement of Environmental Audit indicating the beneficial uses for which the site is suitable, pending future clean-up to achieve a certificate.

1.1 Purpose of the Environmental Audit

Roden Street Pty Ltd engaged Dr Paul Moritz to complete an Environmental Audit of the subject property, located at 101-105 Hope St, Brunswick, Victoria ("the site"). The purpose of the Audit was to issue a Certificate of Environmental Audit or, where that was not possible, to issue a Statement of Environmental Audit, as a requirement of the Planning Permit for the site.

1.2 Audit Area

The Audit Area comprises the whole of the property constituting the site. It is currently described as Lot 1 on Plan of Subdivision 626893Q. When the Audit was initially notified to EPA Victoria, the Audit Area was part of a larger site, with the same street address, and described as Lot 2 LP89346.

The site location is shown in Drawing 1. The Audit Area, and its surveyed boundaries, is shown in Drawing 2. The site (and the Audit Area) occupies an area of 1231 m^2.

1.3 Proposed Site Development

It is understood that Roden Street Pty Ltd proposes to redevelop the site for high density residential use, retaining the existing office building in the north east corner of the site for conversion into four multi-level apartments. A copy of the proposed development plans was included as Appendix B of the environmental site assessment report prepared by Diomides.

1.4 Activities Conducted by the Auditor

In conducting this Environmental Audit pursuant to s53W of the Act, the Environmental Auditor undertook the following activities:

- Reviewed and commented on the report:
  Site Contamination Assessment 101-105 Hope Street, Brunswick, Victoria.
  Diomides and Associates report, dated June 26 2012. Reference CD1379 DA1468.
- Conducted a site inspection in company with the site owner and a member of the Auditor's team on 5 April 2013;
- Formed an opinion on the condition of the site, and the nature and extent of any harm or detriment, or the risk of any possible harm or detriment, to beneficial uses of the land caused by the site conditions;
- Consulted with Planners at the City of Moreland regarding the Conditions to be included in the Statement of Environmental Audit;
- Conducted further site inspections on 12, 20 and 24 July 2013;
- Completed the Environmental Audit Report and Certificate of Environmental Audit.

1.5 Information Relied upon by the Auditor

1.5.1 Legislation

Environment Protection Act 1970.

Environment Protection (Industrial Waste Resource) Regulations 2009.

State Environment Protection Policy (Prevention and Management of Contamination of Land), 4 June 2002 ("the Land SEPP").

State Environment Protection Policy (Groundwaters of Victoria), 17 December 1997. ("the Groundwater SEPP").

State Environment Protection Policy (Waters of Victoria) 4 June 2003 (and Schedules).("SEPP WoV").

1.5.2 Guidelines, Standards and Codes of Practice

National Environment Protection (Assessment of Site Contamination) Measure, December 1999 ("the NEPM"). [NEPC 1999].

Industrial Waste Resource Guidelines (IWRG) 701 – Sampling and Analysis of Waters, Waste Waters, Soils and Wastes, EPA Victoria June 2009.

Australian Standard AS 4482.1-2005 *Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil. Part 1: Non-volatile and Semi-volatile Compounds*, Standards Australia 2005.

Australian Standard AS 4482.2-1999 *Guide to the Sampling and Investigation of Potentially Contaminated Soil. Part 2: Volatile Substances*, Standards Australia 1999.

Australian Standard AS 2159-2009 *Piling – Design and Installation*, Standards Australia 2009..

An amendment to the NEPM was finalised in May 2013, during the time that this Environmental Audit Report was being prepared. Hence, any reference to the NEPM is to the original version issued in December 1999, and not to the amended (2013) version unless otherwise noted.

1.5.3 Site Assessment Reports

Report to Roden Street Pty Ltd. Site Contamination Assessment 101-105 Hope Street, Brunswick, Victoria. Diomides and Associates report, dated June 26 2012. Reference CD1379 DA1468. ("Diomides SCA report") [Diomides 2012].

Report to Roden Street Pty Ltd. Preliminary Soil Contamination Assessment 101-105 Hope Street, Brunswick, Victoria. Diomides and Associates report, dated 21 May 2009. Reference DA1468/ CD1236. ("Diomides preliminary report") [Diomides 2009].

1.5.4 Environmental Audit Reports for Nearby Sites

The Auditor accessed and referred to the Environmental Audit Reports listed in Table 1 (and obtained from the EPA Victoria website) to inform the review of local groundwater conditions and to assess the potential for the audit site to be contaminated by off-site sources.

Table 1 : Environmental Audits Referenced

Location	Auditor	Firm	Date	CARMS No.
210 Albion Street	Tim Russell	Coffey Environments Australia Pty Ltd	15/10/2010	67364-1
10-12 Breese Street	Philip Hitchcock	Environ Australia Pty Ltd	11/03/2008	63250-1
21 – 35 Hope Street Brunswick	Richard Graham	Sinclair Knight Merz Pty Ltd	13/04/2006	52306-1
21 – 35 Hope Street Brunswick	Richard Graham	Sinclair Knight Merz Pty Ltd	15/11/2005	52306-2
95 Hope Street Brunswick	Peter Ramsay	Peter J Ramsay & Associates Pty Ltd	18/06/2010	67519-1
107-109 Hope Street Brunswick	Fouad Abo	Hyder Consulting (Australia) Pty Ltd	03/02/1998	34343-1

1.6 Auditor's Support Team

No member of the Auditor's approved Expert Support Team was involved in completing this Environmental Audit.

2. Background Information

2.1 Site Details

A summary of the site details are provided in the Table 2.

Table 2 : Summary of Site Details

Site Details	Description
Site Address:	101 - 105 Hope Street, Brunswick
Site Location:	On the southern side of Hope Street, facing Sutherland Street. Melway Reference: 29 F6 37.763580759189°S 144.95471°E
Certificate of Title Details:	Lot 1, PS 626893Q (originally notified to EPA Victoria as Lot 2 LP89346)
Site Area:	0.12 hectares
Zoning:	Mixed use zone (MUZ)
Surrounding Land Uses:	East: Commercial South: Commercial West: Commercial North: Hope Street, then residential housing
Site Condition at Commencement of Audit:	Vacant building previously used for office spaces. A building used for warehousing purposes had been located south of the office space, but was demolished with only the slab remaining. The western section of the site was vacant with a brick paved area located to the west of the building, previously used as a car park.
Site Condition at Completion of Audit:	Semi-demolished warehouse and vacant office. Brick paving and concrete slab remain in place.
Summary of Site History:	The site has a long history of commercial and industrial use, beginning in approximately 1915/1916, where it was successively occupied by a timber moulding firm, an engineering company, a metal products manufacturer and iron foundry, office spaces occupied by consulting and accounting firms and a warehouse used by a metal products manufacturer.

The site is a rectangular shape, and is generally flat. The southern section is located at a slightly higher elevation compared to the northern section of the site. A vacant two-storey office building occupies the north-east corner of the site. A masonry wall, formerly part of a now-demolished building, divides the northern and southern portions of the site.

Diomides ESA Report (Diomides 2012describes a site inspection conducted on 11 May 2012. The office building was described as constructed of brick walls and sheet metal roofing, with a concrete floor slab that appeared to be in good condition at the time of the inspection. A brick-paved car park was located west of the office space, and the former commercial/industrial warehouse was located south of the office space. The report notes that the warehouse building had since been demolished, with only the concrete slab of the warehouse still present. A concrete driveway was noted on the western section of the site.

The ESA Report noted that no above- or under-ground storage tank, triple interceptor traps, breather pipes, fill points, pits or sumps were identified within the site boundaries. Diomides sought details of any possible underground facilities from various sources familiar with the site, and none could be identified.

The Auditor notes that a pit containing a fire service main was identified on the northern boundary during his initial site inspection.

2.2 Previous Investigations

The Auditor is not aware of any previous environmental investigations at the site, prior to the preliminary investigation undertaken by Diomides & Associates (Diomides 2009).

2.3 Geology and Hydrogeology

2.3.1 Regional / Local Geology

Diomides reports that the site is underlain by "..*silty clays and boulders derived from the underlying basalt of the Quaternary Aged Newer Volcanics*". However, the Auditor notes that, according to the Geological Survey Victoria (GSV) 1:63,360 series *Melbourne* geological map (GSV 1974), the site is underlain by Silurian rock and soil of the Dargile formation. This was confirmed by the GSV 1:250,000 series *Melbourne* geological map (GSV 1997). However, the Auditor also notes that Diomides' bore logs record the natural soil at the site as "*basaltic clay"*.

2.3.2 Hydrogeology Regional/ Local

Diomides reports that a desktop hydrogeological study was conducted on the basis of five nearby audit reports located within a 350 m radius of the site. These indicated that potential groundwater depth is between 3 m and 15 m below ground level (bgl), although it was inferred that the 3 m depth was likely to consist of perched water. On this basis, Diomides concluded that the likely groundwater depth was 8-15 m bgl. Diomides noted that groundwater flow was likely to be in a west to south-westerly direction, and that groundwater salinity was likely to be in the Segment B or C range, as defined in the groundwater SEPP.

The Auditor consulted the *Melbourne Groundwater Map* (http://www.water.vic.gov.au/__data/ assets/ pdf_file/0010/53794/Melbourne-Groundwater-Map-LowRes.pdf) which indicated that the groundwater in Brunswick is likely to be in the range 1001 – 3500 mg/L TDS. This would place the groundwater in Segment B. The *South Western Victoria Water Table Map* (DCNR, 1995]) indicates that groundwater beneath the site is likely to be Segment C (in the range 3500 – 13000 mg/L TDS).

A brief search of the *Visualizing Victoria's Groundwater* (VVG) website reports the salinity in the range of 1,000 to 3,500 mg/L, placing groundwater in Segment B. Eight wells were identified within 1 km of the site and details are presented in Table 3. No information on groundwater chemistry was available for these bores.

Table 3 : Summary of Nearby Groundwater Wells

Well Identification	Distance and direction from site	Year Installed	Depth of well
S9019929/1	0.6 km SW	2004	13.5 m
S9032711/1	0.7 km NE	N/A	25 m
39033211/1	0.7 km SE	N/A	25 m
310356	0.9 km W	1952	25 m
310357	0.9 km W	1952	149 m
310358	0.9 km W	1952	19 m
310359	0.9 km W	1952	16 m
310360	0.9 km W	1952	17 m

The Auditor also reviewed several Environmental Audit Reports for sites in the vicinity of the site, as referenced in Table 1. The review reported groundwater at depths between 8 – 10 m below the ground surface, and fluctuating groundwater flows from west to south to south-west, depending on the date of sampling. It was inferred in the various audit reports that the fluctuating flow was a consequence of a flat water table.

2.4 EPA Priority Sites Register

A search of the EPA Priority Sites Register found that the subject site is not listed on, and is not in the vicinity of, a site listed on the Priority Sites Register as of 4 July 2013. The extract from the Register is included in Appendix H.

2.5 Local Former Quarry Sites

Information provided in Diomides 2012 indicated the presence of several former quarries and clay pits within 500 metres of the site. These have all been filled, although Diomides could not identify the material used for filling in some cases. Diomides provided further information on these sites indicating that, while one or more might have been used to receive putrescible and municipal wastes, the period of time since landfilling ceased at these sites would indicate that there was a low likelihood of landfill gas impacts on the Audit site. See Appendix G, correspondence from Diomides dated 19 March 2013.

3. Quality and Completeness of Assessment Consultant's Assessment Report

This Environmental Audit Report provides an Audit of the environmental quality of the segment of land at the subject site and relies upon site assessment works conducted by Diomides as the assessment consultant. As part of the Environmental Audit, the work completed by Diomides has been reviewed by the Auditor in the context of its completeness in accordance with relevant Regulations and Guidelines.

The specific details of the assessment, including the nature and extent of soil and possible groundwater contamination, are described in detail later in relevant sections of this environmental Audit report. This section reviews the quality and completeness of the environmental assessment works performed by Diomides, assessing these attributes of Diomides's work against the requirements of Appendix 2 of the *Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit* (EPA Victoria 2007) ["EPA Publication 759.1"].

The Diomides assessment works that have been reviewed comprise the following:

- Diomides & Associates report, Report to Roden Street Pty Ltd. Site Contamination Assessment 101-105 Hope Street, Brunswick Victoria. 26 June 2012 (Diomides 2012); and
- Diomides & Associates report, Report to Roden Street Pty Ltd. Preliminary Soil Contamination Assessment 101-105 Hope Street, Brunswick Victoria. 21 May 2009 (Diomides 2009).

3.1 Conformance with EPA Victoria Requirements

The information provided by Diomides has been assessed against, and generally follows the structure outlined in Appendix 2 of EPA Publication 759.1 (EPA Victoria 2007). Conformance with other key requirements of the *National Environment Protection (Assessment of Site Contamination) Measure* 1999 has also been included in this assessment.

Table 4 : Assessment of Contents of Site Assessment Report

History of site uses	Diomides consulted a variety of sources in assembling the site history information, including: interviews with previous owners/occupiers and employees that previously worked at the site; various other historical sources including the review of EPA Certificates and Statements of Audit, aerial photographs, Sands & McDougall Directories, historical Titles, Melbourne and Metropolitan Board of Works (MMBW) plans, WorkSafe Victoria and old maps of the area. The Auditor requested Diomides to further explore the testimony of Mr Vern Tedge cited in the 2012 report, due to an apparent discrepancy in his age. This was satisfactorily resolved. Further clarification was also requested on historical Titles, the presence of former clay quarries in the area, the presence of the site on the Priority Sites Register and potential for chemical/solvent use at the site. These matters were addressed to the Auditor's satisfaction.
History of adjacent land uses	Diomides included an extensive list of current and previous uses for nearby industrial sites, based on a review of the area and the Sands & MacDougall directories for several years. Audit reports from nearby sites were examined by Diomides, and also by the Auditor.
Identification and summary of previous environmental investigations.	Diomides previously conducted a preliminary assessment at the site in 2009, although this assessment was not conducted for audit purposes. No other assessments or investigations were available, other than nearby Audit reports.
Identification of potential contaminants of concern	Diomides prepared an extensive list of potential contaminants of concern, generally consistent with Table 2 of EPA Publication IWRG 621, but which did not necessarily correspond with potential contaminants associated with identified prior uses. Nevertheless, there were no identified potential contaminants of concern for which analysis was not conducted. The Auditor notes that asbestos was identified as a potential contaminant of concern, but no analysis was conducted because no visible fragments were encountered during fieldwork completed as part of the 2012 investigation. A single fragment of asbestos cement sheeting was identified in the 2009 preliminary assessment.

Visual Inspections	Diomides reported on a site inspection conducted prior to sampling at the site. The Auditor verified some of the findings during his own site inspection. The 2009 Diomides report mentions the presence of a potential triple interceptor trap, located just off the north site boundary, adjacent to the driveway. The 2012 Diomides report clarifies that the triple interceptor trap was actually a fire services main. This was verified by the Auditor during his own site inspection in 2013.
Geology and hydrogeology	A brief review, based on Government agency maps, was included. Some information was also included in discussion of Audit Reports from nearby locations. The Auditor also conducted his own review of geological and hydrogeological information available for the area.
Condition of site structures & water courses	There are no on-site water courses. However, there was a mention of stormwater pits made within the 2012 report. The Auditor requested that these pits be defined on the site drawing, which was subsequently conducted. There were minor comments included regarding condition of site structures.
Analytical detection limits	Appropriate laboratory limits of reporting were applied.

Table 5 : Assessment of Scope of Site Investigations to Support an Environmental Audit

Sampling & analysis programme	The number of systematic sampling locations was consistent with AS4482.
Compliance with approved methods/protocols	Laboratory methods were based on accepted and acceptable standard Methods.
Laboratory accreditation	All laboratories held NATA accreditation for the analyses conducted.
Site plans & bore logs	These were provided and considered suitable for use in the Audit.
Quality assurance	Further aspects of quality assurance are discussed in detail in section 7 of this Environmental Audit Report.
Background samples	None were taken, due the limited opportunities to access background soils in a highly built up environment.
Soil screens/targeted chemicals	A limited number of samples was analysed for the full suite of contaminants described in Table 2 of EPA Publication IWRG621. Generally, samples were analysed for the targeted contaminants of concern at the site. Although asbestos was listed as a contaminant of concern, no fragments of potentially asbestos-containing material were encountered during sampling works in 2012.
Other environmental hazards	None identified.

Table 6 : Assessment of Information Required for Contaminants of Concern

Chemical properties	Diomides quoted sulfate concentrations in mg/kg “sulfate as sulfur”, but compare the results against guideline values based on “sulfate as $SO_4^{=}$”. The Auditor made the appropriate adjustments to the reported results.
Form/species	
Physical characteristics	
Potential exposure pathways	An interpretation of soil results for the chemicals of concern has been provided in Section 7 of the Diomides ESA Reports. Where relevant, comments regarding the characteristics (*ie.* mobility, availability, physical characteristics, species present *etc*), potential exposure pathways, potential harm to beneficial uses have been provided.
Potential harm	
Detriment to beneficial uses	
Potential off-site effects	A comparison with established guideline concentrations has been made in order to complete a preliminary assessment of the toxicity of the chemicals of potential concern. The Auditor noted an anomalous result reported for lead at test pit location TP3. The concentration reported for lead in natural soil was greater than the lead concentration in filling above it. Diomides agreed that the result was anomalous but provided justification that further sampling was not required as the concentration was still below NEPM EIL and HIL(D) criteria.

Table 7 : Auditor's comments on the assessment of the Significance of Site Investigation Results

Reference to Land SEPP	The significance of soil assessment results is assessed against the Objectives in the Land SEPP, as discussed Section 8 of this Environmental Audit Report.
Evaluation of risk	An evaluation of risk was undertaken by comparison with established NEPM guidelines.
Compliance with NEPM	
Use of other guidelines	Diomides referenced a number of Guideline documents to assess the significance of contaminants not included in the NEPM Schedule B1. These comprised a generally-accepted list of documents, and the Auditor considered them appropriate for the purposes of the Audit.
Consideration of impact to all beneficial uses	All protected beneficial uses for high density development were considered by Diomides.
Appropriate use of waste classification criteria	EPA Waste Classification criteria were applied on an individual basis to each sample location. There was no attempt to provide an overall waste soil classification, but given that the proposed development does not envisage excavation of a basement, this is not a shortcoming of the reports.

3.2 Auditor Oversight of Works

The 2012 ESA was completed prior to the engagement of the Auditor by the client, and, hence, there was no oversight of that work by the Auditor. Following his review of the initial ESA Report, the Auditor requested further clarification of several points from Diomides, which were answered to the satisfaction of the Auditor.

The Auditor was also satisfied that the assessment works generally conformed to accepted guidelines, and that any departures from best practice were not material to the investigation findings.

3.3 Auditor's Opinion on the Completeness of Assessment Consultant's Assessment Report

The Auditor considers that the Diomides ESA Report provides an adequate basis for use in the Environmental Audit report.

From an overall perspective, it is concluded that the data set developed by the assessment consultant provides a reliable understanding of potential site contamination and that there is a high degree of certainty that the site contamination profile reported by the consultant is reliable.

4. Potential Contaminants of Concern

4.1 Potential Contaminant Sources and Types

4.1.1 Review of Site History

Diomides conducted a comprehensive review of the site history, drawing on information from multiple sources, including interviews with former site workers with experience of the site back to the 1930's. Information from Sands and MacDougall Business Directories was presented covering 10-year intervals from 1904. Aerial photographs were presented, dating back to 1951.

MMBW records indicated that the land was vacant until at least 1906, although a number of clay quarries had been developed in the area, with quarries located to the south, south-east and south-west, while neighbouring land to the immediate south and east appeared to be occupied by residential dwellings.

The information assembled by Diomides indicated that the site was used for a range of light industrial and commercial activities. From the perspective of potentially-contaminating activities, the most significant were: timber moulding makers and motor engineers from 1924 to 1972, an iron foundry from 1972 to 1995, storage and manufacture of metal products from 1995 to 2009 (with the front section of the warehouse vacant for approximately 25 years). Prior to 1914, Diomides quotes that the site use was unknown but likely to comprise vacant land potentially used for cropping/grazing, with what appeared (from the MMBW plan) to be three small houses located on the site.

At the commencement of the Audit, the site was vacant and the office building unoccupied. The warehouse building on the southern part of the site had been demolished.

Diomides reported that the site was not listed on the EPA Victoria Priority Sites Register as of November 2012. A more current extract is attached as Appendix H, indicating that the site is not listed on the Register, nor is it within the vicinity of a site listed on the register.

4.1.2 Site inspections by the Auditor

The Auditor conducted a site inspection on 4 April 2013 in company of Mr Joe Di Monte of Roden Street Pty Ltd, the site owner. Photographs from this site visit are included in Appendix E.

The site comprised a two-storey office building on the eastern boundary, in the northern half of the site. A brick paved car park was evident to the west of the building. The car park was bounded by a masonry wall to the south, running east west almost the full width of the site. A concrete driveway led to the rear of the site from the front gate on Hope Street. The site owner explained that the building was to be retained in his plans to re-develop the site. The concrete driveway showed signs of cracking.

There were no signs of any underground tank filling points or breather pipes. There were no footings visible which might have indicated that above ground tanks had existed on the site.

Behind the east-west running wall was a demolished former warehouse / factory building, with only the concrete floor slab remaining. The concrete was missing in some areas, exposing site soils below the slab. There were several stockpiles of demolition waste (see photos) and in the south west corner of the site, crushed rock and rubble was stockpiled. The site owner explained that this was left over from construction of a new building to the south, on what had formerly been part of the same premises as the Audit site. The material also contained some broken bricks and soil.

Near the front door to the building a number of disused 20 litre oil drums were evident, and identifiable from the labels. However, there were no signs of any staining of the surface on which the drums were standing. Ash and charcoal remaining from an open fire were also evident on the brick-paved area.

The Auditor identified the fire main pit on the northern boundary which had been incorrectly identified as a triple interceptor trap in Diomides' reports. On the southern side of the east-west wall a large diameter pipe was protruding approximately 900 mm vertically from the ground. The Auditor noted this and subsequently sought clarification on its purpose from Diomides. Diomides reported that it was understood to be a water pipe which had supplied water to a toilet cistern

4.1.3 Potential Contaminant Sources

Diomides prepared a list of contaminants, purportedly based on identified site uses, but essentially comprising the same suite of contaminants for each identified previous site use. The Auditor has reviewed this, and adopted the list of potential contaminants listed in Table 8, based on information provided in Appendix J of Australian Standard AS4482.1 (2005), and the Auditor's experience of industrial operations.

Table 8 : Past activities and Potential Contaminants

Activity	Potential contaminants
Storage and manufacture of metal products	Metals including mercury and hexavalent chromium; petroleum hydrocarbons, BTEX, PAH, chlorinated hydrocarbons, and phenols
Iron foundry	Metals including mercury and hexavalent chromium; petroleum hydrocarbons, BTEX, PAH, chlorinated hydrocarbons, and phenols
Timber moulding makers and motor engineers	Metals, TRH, BTEX, volatile organic compounds
Farm land used for grazing and cropping	None in the time frame noted.
Potentially imported fill material	Metals, petroleum hydrocarbons, PAH, organochlorine pesticides, pH, sulfate, phenols and asbestos

Based on the early period in which the site was developed for industrial use, the Auditor considers it unlikely that farming use would have contributed any of the potential contaminants commonly associated with that activity.

4.1.4 Off-site Sources

Diomides prepared a far-ranging review of potential off-site sources of contamination, based on the Sands and MacDougall business directories and other sources. There were no sites in the immediate vicinity which formerly housed activities with potential to cause contamination of the site. This was verified, both by Diomides and by the Auditor, from existing Environmental Audit Reports.

Five audited sites were identified in the immediate vicinity of the site. None of these Reports indicated that the site to which they related had caused off-site impacts on to the Audit site. At the sites at which a groundwater assessment was conducted, the inferred flow direction was indicated to fluctuate, flowing from west to south to south-west, depending on the date of sampling. The various audit reports consulted inferred that the fluctuating flow was a consequence of a flat water table.

On this basis, the Auditor considers that the sites at which groundwater was investigated were either down-gradient or cross-gradient of the Audit Site and, so, unlikely to impact the Audit site. The site immediately to the west, 107-109 Hope Street, Brunswick was the subject of an Environmental Audit completed in 1998. In that Audit, the auditor concluded that there was a limited potential for groundwater contamination, and did not identify the current Audit site as a source of off-site contamination.

The site is not in the vicinity of a site listed on the EPA Victoria Priority Sites register (see Appendix H).

4.2 Potential for Groundwater Contamination

Evidence presented by Diomides indicated that there was a low potential for site contamination to have impacted on groundwater. This evidence included:

- There were no indications of underground storage of petroleum or other mobile products, or bulk storage of such products. Concentrations of hydrocarbons and other mobile contaminants in soil were low;
- There were no indications of the presence (or past presence) of waste water sumps or pits (although stormwater pits are present), gully traps, or triple interceptor traps, all of which might have provided preferential pathways for liquid / mobile contaminants;
- Concentrations of metals, and other less mobile contaminants were generally low;
- On nearby audit sites, the depth to groundwater ranged from 8 – 10 m bgl. Hence, it is considered unlikely that any contamination in the upper 0.5 metres of the soil / rock profile would reach groundwater.

On this basis, the Auditor concluded that there was low potential for groundwater contamination and that an intrusive investigation of groundwater conditions was not required in order to complete the Audit.

4.3 Potential Human and Environmental Receptors of Contamination

Based on the gathered background information, it is anticipated that exposure to potential contaminants from site soils (or groundwater) may occur through the following potential pathways (for sensitive site use):

- Ingestion of surficial soil by site users;
- Human contact with surficial and sub-surface soils;
- Plant uptake through garden cultivation in surficial and sub-surface soils and subsequent ingestion through consumption of the garden produce;
- Plants and soil fauna;
- Dermal contact with surficial and sub-surface soils by site workers (short-term construction or maintenance activity);
- Ingestion of soils by site workers (short-term construction or maintenance activity);
- Inhalation of airborne dusts by site workers (short-term construction or maintenance activity) with surficial and sub-surface soils;
- Off-site impact through dust inhalation resulting from on-site construction activity/disturbance of surficial soils;
- Vapour impact (indoor) to site users by volatilisation from site soils;
- Vapour impact to users of adjacent sites (indoor and outdoor) by volatilisation from site groundwater;
- Users of extracted groundwater;
- Off-site ecosystems, where groundwater may discharge.

It is noted that for the purposes of an Environmental Audit, consideration must be given to potential receptors in the context of unrestricted use. It is noted that not all of the above receptors will be applicable under the currently-proposed high density residential use.

5. Relevant Elements of the Environment (Assessment of Beneficial Uses Relevant to the Site)

All elements of the site, and all beneficial uses of those elements, have been considered in the completion of this environmental Audit. The term "Beneficial Use" is defined in the Act and those beneficial uses to be protected for the various elements are set out within various State Environment Protection Policies established pursuant to the Act. Elements forming part of the site have been evaluated as noted below.

5.1 Land

The Land SEPP sets out the regulatory framework for the prevention and management of land contamination within the State of Victoria. The intent of this framework is to maintain and maximise (to the extent practicable) the quality of the land environment in Victoria, in order to protect its existing and potential beneficial uses.

The Land SEPP identifies and defines specific land use categories as well as a number of protected beneficial uses associated with each of the land use categories.

EPA Victoria considers that land (soil) is polluted where current and/or future protected beneficial uses for the relevant land use categories are precluded. Beneficial uses of land are considered to be precluded when relevant soil quality objectives set out in the Land SEPP for those beneficial uses have been exceeded. Based on this assessment, the Auditor can evaluate the potential to issue a Certificate or Statement of Environmental Audit, based on the proposed land use.

Based on the proposed high density residential development without basement levels and in ground landscaping, the beneficial uses of land requiring protection are shaded in the Table 5.1, which is a reproduction of Table 1 from the Land SEPP. Other beneficial uses have been considered in the context of determining whether the site would also be suitable for beneficial uses relevant to a type of development different than the proposed site use.

All beneficial uses would need to be protected for unrestricted use of the site.

Table 9 : Protected Beneficial Uses of Land

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

5.2 Groundwater

The quality of groundwater in Victoria is protected under the Groundwater SEPP. The stated goal of this policy is to "*maintain and where necessary improve groundwater quality sufficient to protect existing and potential beneficial uses of groundwater throughout Victoria*".

The protected beneficial uses of groundwater are defined in Groundwater SEPP on the basis of the inherent capacity of the groundwater at the site to support specific uses (i.e. the concentration of total dissolved solids). The significance of contaminant impact upon groundwater is assessed in conjunction with the applicable beneficial use. The information indicated that groundwater beneath the site is likely to be Segment B.

On this basis, the following beneficial uses are protected at the site:

- Maintenance of ecosystems;
- Potable mineral water supply;
- Agriculture, parks and gardens;
- Stock watering;
- Primary contact recreation;
- Buildings and structures; and
- Industrial water use.

However, in the absence of an intrusive groundwater investigation at the site, groundwater quality criteria were not adopted, and are not discussed further.

5.3 Surface Water

Surface water is not an element to be audited as there are no surface water bodies on the site being audited, although Moonee Ponds Creek is located approximately 1.5 km to the west of the site. Consideration of the groundwater beneficial use *Maintenance of Ecosystems*, requires an assessment of the potential for impact on surface water bodies receiving input from the groundwater aquifer. An intrusive groundwater investigation has not been completed at the site.

5.4 Air

Beneficial uses of air may be considered relevant in determining the outcome of the environmental Audit, where those beneficial uses may be adversely affected by the condition of other elements at the site.

6. Adopted Audit Criteria

6.1 Adopted Criteria – Soil

To evaluate the potential impact to all beneficial uses, Audit Criteria were adopted against which site conditions could be compared in order to assess the possibility of issuing a Certificate of Environmental Audit. Where the site does not meet all these criteria, a Certificate of Environmental Audit may not be able to be issued.

Audit criteria were adopted based on environmental indicators and objectives listed in Table 2 of the Land SEPP.

6.1.1 Maintenance of Ecosystems

The protection of the beneficial use *Maintenance of Ecosystems* was assessed with reference to the NEPM interim urban EILs (NEPC, 1999). The EILs are based on phytotoxicity, survey data of urban residential properties, and the Australian and New Zealand Environment Conservation Council (ANZECC) 'B' levels (ANZECC & NHMRC 1992).

Where EILs have not been defined in the NEPM, other criteria are referenced.

6.1.2 Human Health

The protection of the beneficial use *Human Health* is assessed with reference to the NEPM Health Investigation Levels (HILs). These HILs provide for a range of exposure settings and associated site uses including:

- standard residential with garden / accessible soil (exposure setting / HIL A)[1];
- residential with minimal soil access (exposure setting / HIL D):
- public open space (exposure setting /HIL E)[2], and;
- commercial / industrial (exposure setting / HIL F).

The Auditor notes that, given the timing of the Audit and the conduct of the site assessment works, the NEPM as published originally in 1999 has been relied on. The NEPM as amended in April 2013 has not been referenced, unless otherwise noted.

The values for HIL A are the base line concentrations from which the other HIL values are defined. HIL D is four times HIL A, HIL E is twice HIL A and HIL F is five times HIL A. From this it follows that if a higher HIL value is exceeded, so too will lower HIL values.

HIL A criteria were used to evaluate the potential impact to the protection of human health in the context of unrestricted site use. Table 10 includes criteria for HIL A , HIL D and HIL F, only.

[1] HIL A criteria are also adopted for other sensitive uses such as children's services facilities and primary schools.
[2] HIL E criteria are also adopted for secondary schools.

Where HIL A criteria were exceeded, site conditions were compared with HIL D criteria to determine whether the site is suitable for the proposed high density residential site use and, hence, whether it is possible to issue a Statement of Environmental Audit. Comparisons with other HIL criteria (HIL E, HIL F) will also be conducted in order to determine whether the site would be suitable for land uses other than the proposed high density residential use, such as parks and reserves, recreational open space and playing fields (including secondary schools), agricultural and commercial / industrial use.

It is noted that while the EILs and HILs are adopted as screening criteria, they are investigation levels and not mandatory limits.

6.1.3 EIL and HIL values

Table 10 displays adopted Audit Criteria for the most significant contaminants of potential concern at the site.

Table 10: Adopted Audit Criteria for the Beneficial Uses Maintenance of Ecosystems and Human Health (mg/kg)

Contaminant	Maintenance of Ecosystems[1]	Human Health		
		Standard Residential/ Sensitive Use[2]	High Density Residential Use[3]	Commercial / Industrial Use[4]
Metals and inorganic contaminants				
Arsenic	20	100	400	500
Cadmium	3	20	80	100
Chromium (total)	400	-	-	-
Chromium (VI)	1	100	400	500
Copper	100	1,000	4,000	5,000
Lead	600	300	1,200	1,500
Mercury	1	15	60	75
Molybdenum	3[7]	200[8]	200[8]	200[8]
Nickel	60	600	2,400	3,000
Selenium	0.7[7]	100[6]	100[6]	100[6]
Tin	50[5]	900[6]	900[6]	NS
Zinc	200	7,000	28,000	35,000
Cyanide	-	500	2,000	2,500
Organic contaminants				
Benzene	1[9]	1[9]	-	
Toluene	1.4[9]	130[9]	-	-

Contaminant	Maintenance of Ecosystems[1]	Human Health		
		Standard Residential/ Sensitive Use[2]	High Density Residential Use[3]	Commercial / Industrial Use[4]
Ethyl benzene	3.1[9]	50[9]	-	-
Xylenes	14[9]	25[9]	-	-
TPH C_6-C_9	-	65[9]	-	-
TPH C_{10}-C_{36}	-	1,000[9]	-	-
Benzo(a)pyrene	1[9]	1	4	5
Total PAH	1[7]	20	80	100
PCB's	-	10	40	50
Phenol	0.05[7]	8,500	34,000	42,500
Aldrin +Dieldrin	-	10	40	50
Heptachlor	-	10	40	50
DDT+DDD+DDE	-	200	800	1000
Chlordane	0.00003[7]	50	200	250

1: NEPM Schedule B(1) Ecological Investigation Levels (EILs) – Interim EILs for urban setting (unless otherwise specified).
2: NEPM Schedule B(1) Health Investigation Levels (HIL A) – Standard Residential / sensitive use (unless otherwise specified).
3: NEPM Schedule B(1) Health Investigation Levels (HIL D) – Residential with minimal opportunities for soil access (unless otherwise specified).
4: NEPM Schedule B(1) Health Investigation Levels (HIL F) –Commercial / Industrial (unless otherwise specified).
5: ANZECC B Levels - ANZECC & NHMRC 1992
6: Netherlands 2009 (Indicative of Serious Contamination) adopted in the absence of NEPM EIL/HIL and ANZECC B levels.
7: Netherlands 2009 (Target value) adopted in the absence of NEPM EIL/HIL and ANZECC B levels.
8: Netherlands 2009 (Intervention value) adopted in the absence of NEPM EIL/HIL and ANZECC B levels
9: NSW EPA (1994) *Guidelines for Assessing Service Station Sites*

6.1.4 Building and Structures

The Land SEPP states that "*contamination must not cause the land to be corrosive to or adversely affect the integrity of structures or building materials*". In the part of Victoria where the site is located, ground conditions are not considered likely to present any threat to buildings and structures, and this aspect can be assessed from field observations (i.e. condition of concrete and soil) and analytical results (i.e. pH). Where structures are likely to come into contact with contaminated soils, audit criteria for pH, chloride and sulfate were adopted from AS 2159-2009 *Piling – Design and Installation* (SAI Global 2009)

Table 11 : Adopted Audit Criteria for the Beneficial Use Buildings and Structures

Exposure condition				Exposure Classification	
Sulfates (expressed as SO_4)		pH	Chlorides in groundwater mg/L	Soil conditions A^	Soil conditions B^^
In soil mg/kg	In groundwater mg/L				
<5000	<1000	>5.5	<6000	Mild	Non - Aggressive
5000 - 10 000	1000 - 3000	4.5 - 5.5	6000 – 12 000	Moderate	Mild
10,000 – 20, 000	3000 – 10 000	4 – 4.5	12 000 – 30 000	Severe	Moderate
>20 000	>10 000	<4	>30 000	Very severe	Severe

^ Soil conditions A - high permeability soils (*eg* sands and gravels) which are in groundwater
^^ Soil conditions B - low permeability soils (e.g., silts and clays) or all soils above groundwater.
Table adopted from AS2159–2009 *Piling –Design and Installation*

6.1.5 Food, Flora and Fibre

The Land SEPP states that contamination must not "*adversely affect produce quality or yield*" or cause the level of any applicable chemical substance to exceed the level of the chemical that is specified by the *Australian New Zealand Food Authority, Food Standards Code*.

In consideration of the above, the Auditor has initially assessed the protection of the beneficial use *Production of Food, Flora and Fibre* with reference to the phytotoxicity-based NEPM interim urban EILs (NEPC,1999), given that food, flora and fibre production would-be dependent on plant growth. However, as the Land SEPP also recognises that the potential for a specific soil contaminant to adversely this beneficial use*"...is also a function of the bioavailability of the contaminant...",* the Auditor has (where appropriate) also assessed the protection of the beneficial use with consideration of site-specific and/or published lines of evidence (such as the physical characteristics and mobility of the contaminant(s) of concern).

6.1.6 Aesthetics

The Land SEPP states that "*contamination must not cause the land to be offensive to the senses of human beings*". Currently there are no concentration-based aesthetic criteria for soil. While aesthetic observations are subjective, it is considered that if there is discolouration, noticeable odour from the soil on the site or if there are obvious components of waste, such as rubble, slag, bagged waste or similar, then there is a potential aesthetic concern.

6.2 Adopted Criteria - Groundwater

In the absence of a groundwater assessment as part of the Environmental Audit, it was not necessary to adopt Audit Criteria for protection of groundwater beneficial uses.

7. Quality of Assessment Data

This section of the Environmental Audit Report focuses on the fieldwork, sampling and analysis methods undertaken as part of environmental site assessment conducted by Diomides, the quality control measures implemented, and the information reported by the laboratories selected to analyse samples.

As part of the assessment works, Diomides implemented a quality assurance programme to ensure the reliability and traceability of samples collected. It is noted that key features were:

- Decontamination of all sampling equipment was conducted between samples, and a new pair of disposable latex gloves were used to collect each sample, to ensure cross contamination could not occur;
- Samples were collected in clean vessels provided by the assessor's primary analytical laboratory, and unique sample identification (and other information relevant to the sample) was recorded on sample jars prior to them being placed in insulated containers for transport to the laboratory;
- Chain of custody sheets were used to track transport and analysis of the collected samples;
- The number of grid-based test points advanced at the site was the minimum number of test points required by AS4482.1-2005 and AS4482.2-1999. Data from an additional three test locations were also available in Diomides 2009 (if needed).

During the course of field work, Diomides collected quality control samples, including one rinsate and one trip blank (intended to indicate if cross-contamination of samples had occurred), and (intra- and inter- laboratory replicate samples (intended to assess the precision of the sample collection, storage and analysis process). A detailed discussion of these quality control samples is provided in Sections 7.1 to 7.3.

Laboratory quality assurance is addressed via the requirement in EPA Publications 759.1 and IWRG 701 that all analyses associated with an environmental assessment of potentially contaminated land should *"be performed in laboratories with National Association of Testing Authorities (NATA) accreditation for the analyses undertaken and have test reports bearing the NATA stamp of endorsement"*.

The following information outlines the Auditor's consideration of the Quality Control (QC) information provided as part of this environmental assessment.

7.1 Assessor's Field QC

The type and number of soil QC samples taken by the assessor are summarised in Table 12.

Table 12 : QC Measures for Soil

Type of Samples	Number of Samples	Number of QC Samples Conforms to Standard?
Primary samples	12	-
Intra-laboratory duplicates	1	Yes
Inter-laboratory duplicates	1	Yes
Rinse Blanks	1	Yes
Trip Blanks	1	

The number of replicate samples collected during the soil sampling meets the requirements outlined in the Australian Standard AS4482.1-2005. The replicate samples were, as a minimum, analysed for the primary contaminants of concern. Diomides undertook a review of QC data and presented these findings and discussion of results in their report. The Auditor conducted an independent review of this data and concurred with the assessor's results.

The Auditor's conclusions are discussed as follows.

7.1.1 Field Replicates

The degree to which replicate samples are in agreement is measured by the Relative Percent Difference (RPD), which is the ratio of the difference between replicate results to their mean. The Auditor has adopted an RPD value of 50% as the acceptance limit for agreement between replicates.

7.1.1.1 Intra-Laboratory Duplicates

One intra-laboratory replicate pair (BLIND from BH2 (0.3-0.4)) was collected and analysed for metals, BTEX, PAHs and TRHs, and RPDs were calculated on 44 analyte pairs.

Diomides reported RPDs from 0% to 86.4%, with 98% of the reported blind replicate RPDs were under the acceptance criterion of 50%. Only one reported RPD (for copper) exceeded the acceptance criterion .

However, the auditor noted that one of the copper concentrations was less than the laboratory limit of reporting (LOR), 5 mg/kg, and that the calculated RPD can be influence by the manner in which this data point is treated. Diomides had assumed a value of half the LOR for the purposes of calculating the RPD. If the LOR value is used in the same calculation, the RPD value is 23%, within the acceptance limit. Hence, the Auditor notes that the variation in the replicate results represents a potentially small difference between two small numerical values. On this basis, the variation between the two replicate results is not considered to affect the interpretation of the data.

7.1.1.2 Inter-Laboratory Duplicates

One inter-laboratory duplicate ((SPLIT from BH2 (0.3-0.4)) was collected and analysed for metals, BTEX, PAHs and TRHs, and RPDs were calculated on 37 analyte pairs.

Diomides reported RPDs from 0% to 94.7%. 97% of the reported blind replicate RPDs were under the acceptance criterion of 50%. Only one reported RPD (for copper) exceeded the acceptance criterion. Again, however, the calculated RPD was affected by the manner in which a result less than the LOR was treated. The Auditor notes that the result for copper from the inter-laboratory replicate is in close agreement with the intra-laboratory replicate, suggesting that there might be some heterogeneity in the material sampled.

On this basis, the Auditor concluded that the RPD values are all acceptable.

The Auditor notes that the limit of reporting for arsenic at the secondary laboratory was significantly higher than that at the primary laboratory.

7.1.2 Rinsate and Field Blanks

Diomides collected one rinsate blank during the ESA soil sampling. It was analysed for eight metals and all results were reported below laboratory detection limits. This indicates that field decontamination procedures were effective, and minimised the potential for cross-contamination.

Diomides obtained one field blank during the ESA field works. The field blank was analysed for TRH and BTEX and all results were reported below laboratory detection limits. This provides the Auditor with confidence that cross contamination of samples has not occurred during transport.

7.1.3 Field QC Conclusions

A review of the available information indicated the QC programme and assessment was generally consistent with AS4482.1-2005. The Auditor considers the field QC results to be acceptable for the purpose of the Audit.

7.2 Laboratory QC

Internal laboratory QC procedures conducted by both laboratories included the analysis of laboratory blanks, internal duplicates and spikes. Method blank samples showed no detectable concentrations.

The primary laboratory, mgt LabMark, reported all RPDs for internal laboratory duplicates within its adopted range of 0-30%, except for four results for sample BH1 0.15-0.25 (arsenic, chromium, copper and nickel) and one result for TP6 0.25-0.3 (lead). However, the mgt LabMark laboratory report indicated that the calculated RPDs passed its own acceptance criterion, as specified within its standard operating procedures (SOP15). This states that, effectively, a variation between sample results is acceptable if both are less than 10 times the laboratory LOR.

Matrix spike recoveries were in the acceptable range 70% - 130%.

The secondary laboratory, Envirolab, reported RPDs for internal laboratory duplicates within its recommended range of 0-50%. Matrix spike recoveries were in the range 70% - 130%. All duplicates were also within the range of 0-30%.

Overall, the Auditor considers the laboratory QC results to be acceptable for the purpose of the Audit.

7.3 Auditor Comment on the Quality of the Assessor's Data

Overall, the Auditor considers that the results of Diomides field QC measures, and the laboratories' QC measures, are acceptable for the purpose of the Audit.

8. Assessment of Contamination

8.1 Soil Profile Description

Diomides noted that the site is largely covered by hard (concrete slab or brick paving) surfaces. At one sample location, TP4 a layer of filling was observed at the surface. Across the site there was a layer of filling, comprising variably of grey to brown silty clay or orange sands, to a maximum depth of 0.3 m, underlain by grey basaltic clays.

Diomides' visual and olfactory assessment indicated that there were no observable signs of contamination.

8.2 Soil Contamination Nature and Extent

The results of Diomides soil assessment are presented in summary tables in Appendix J of its 2012 ESA Report (Diomides 2012). These are reproduced in Appendix B of this Environmental Audit Report. Samples were taken at six locations on site, as shown in Drawing 2.

8.2.1 Metals

There were only two results which exceeded any Audit Criteria.

The lead concentration at one location (TP3 in natural soils) exceeded the adopted Audit Criterion for protection of *Human Health* (300 mg/kg). The Auditor considered this a potential anomaly, given that the concentration of lead in the filling sample above it was appreciably lower, and no other exceedances were reported in any other natural soil sample. However, subsequent enquiries with Diomides confirmed the reliability of this result.

The arsenic concentration in one sample, BH2 0.2-0.3 m, was in excess of the adopted Audit Criterion for protection of *Maintenance of Ecosystems*.

No other metals were reported at concentrations in excess of any other adopted Audit Criteria.

8.2.2 Other Inorganic Contaminants and Indicators

Diomides analysed a limited number of samples for total cyanide, fluoride, sulfate and pH. No results indicated that a beneficial use was precluded.

There were no total cyanide concentrations reported above the laboratory limit of reporting (LOR).

pH values (on three samples) were reported in the range 8.5 – 12. One sample was from natural soil (pH 9.5) and three were from filling (pH 8.5, 9.7 and 12). These pH values are within the range considered *non-aggressive* to concrete and steel.

The Auditor notes that Diomides reported sulfate concentrations as "sulfur (S)" but compared the results with criteria based on "sulfate (as $SO_4^{=}$)". The Auditor re-calculated these data and they are presented in Table 11. There were no reported exceedances of the adopted criterion for protection of *Buildings and Structures*.

Table 13 : Recalculated soil sulfate concentrations (as mg/kg)

Sample number	Sample Type	Reported sulfate (as S)	Auditor calculation - sulfate as SO_4.
BH1 0.15-0.25	Filling	50	150
TP3 0.15-0.25	Filling	<10	<30
TP6 0.4-0.5	Natural	12	36

8.2.3 Organic Contaminants

Apart from some minor hydrocarbon concentrations in two locations (TRH C_{10}-C_{36} less than 150 mg/kg), all concentrations of organic contaminants reported by the laboratories were below laboratory reporting limits. The measurable concentrations of heavier hydrocarbons (in the TRH C_{16}-C_{34} range) were below the adopted Audit Criterion.

8.2.4 Contaminant Leachability

No leachability testing was conducted on any samples collected from the site. However, given the generally low concentrations of contaminants of potential concern, the Auditor does not consider this to affect the outcome of the Audit.

8.2.5 Asbestos

Potential asbestos-containing material (PACM) was not identified in any soil sample taken during the 2012 assessment works, and Diomides bore logs do not indicate its presence in any of the bore holes installed at the site. The Auditor notes during the 2009 Diomides assessment, a sample of cement sheeting from sampling location BH2, at a depth of 0.6 m bgl, (see Drawing 2, Appendix B) was found to contain chrysotile asbestos. There was no asbestos detected in the soil at this location. This location was close to, and west of, the office building in the north east corner. (Diomides 2009)

8.3 Discussion of Contaminant Impact to Beneficial Uses of Land

Diomides only considered the impact of contaminant concentrations on the proposed site use (high density residential), so the Auditor has conducted his own assessment of contaminant impact on beneficial uses of land. The beneficial uses of land potentially precluded by the presence of soil contamination are listed in Table 14, and the potential for impact on all beneficial uses is discussed further, below. However, the Auditor notes that the data in Table 12 reflect only the maximum concentrations of contaminants or, in some cases, several individual samples in which contaminant concentrations exceeded the adopted Audit criterion for protection of *Human Health* and *Maintenance of Ecosystems*.

Table 14 : Soil Contaminant Ranges and Beneficial uses Potentially Precluded (mg/kg)

Contaminant	Reported Concentration Range	Beneficial uses potentially precluded (Shaded Cell)			
		Maintenance of Ecosystems	Human Health		
			Standard Residential/ Sensitive Use	High Density Residential Use	Commercial/ Industrial Use
Lead	<5 – 540	600	300	1,200	1,500
Arsenic	<2 – 33	20	100	400	500

8.3.1 Human Health

Schedule B (7A) of the NEPM provides guidance on a series of statistical tests to use when comparing contaminant concentration data with HILs. These are:

- The arithmetic mean of results is less than the HIL;
- The standard deviation of the results must be less than 50% of the HIL; and
- No single value should exceed 250% of the HIL.

As an alternative, the Auditor has also used the 95% upper confidence limit of the mean (95% UCL) concentration to assess the significance of the assessors results. The calculation of this value incorporates (among other parameters) the standard deviation of the data set.

The statistical analysis is based on overall site data, because there is only a limited number of data points for contaminant concentrations in the filling. All data are, however, from within 1 m bgl where human contact with soil is most likely.

The results of the initial data analysis for lead, the contaminant with a sample concentration exceeding the adopted Audit criterion for *Human Health*, are displayed in Table 15. The statistical analysis is based on overall site data, because there is only a limited number of data points for contaminant concentrations in the filling. All data are, however, from within 1 m bgl where human contact with soil is most likely.

Table 15: Summary of Soil Concentration Statistics (assessed for low density residential use)

	Lead
HIL A	300
Number of results	12
Mean Concentration (mg/kg)	62.2*
Maximum concentration (mg/kg)	540
Maximum concentration/HIL (%)	180%
Std.Dev./HIL(%)	48%*
95% UCL_{mean}concentration (mg/kg)	253*
Acceptable? (Y/N):	Yes

*Based on non-parametric statistical analysis.

Based on this analysis, lead concentrations on site meet the statistical tests for low density residential use. As a result, it may be concluded that these concentrations will also meet the criteria for high density and industrial/commercial uses, which are less conservative than the criterion for low density residential use.

The outputs from the Auditor's statistical analysis of results are provided in Appendix F.

8.3.2 Maintenance of Ecosystems

The results of the Auditor's statistical analysis of arsenic concentrations, the one contaminant with a sample concentration exceeding the adopted Audit criterion for *Maintenance of Ecosystems*, are shown in Table 16. The statistical analysis is based on overall site data, because there is only a limited number of data points for contaminant concentrations in the filling. All data are, however, from within 1 m bgl where plant and animal contact with soil is most likely.

Table 16: Summary of Soil Concentration Statistics (assessed for Maintenance of Ecosystems)

	Arsenic
EIL	20
Number of results	12
Mean concentration (mg/kg)	6.6*
Maximum concentration (mg/kg)	33
Standard Deviation/EIL	44%*
95% UCL_{mean}concentration (mg/kg)	18.3*
Acceptable? (Y/N):	Yes

*Based on non-parametric statistical analysis.

Based on this analysis, arsenic concentrations on site meet the statistical tests for *Maintenance of Ecosystems*.

8.3.3 Production of Food, Flora and Fibre

Concentrations of potential contaminants at the site are considered unlikely to preclude the beneficial use *Production of Food, Flora and Fibre*, on the basis that there are no exceedances of the adopted Audit criteria.

8.3.4 Buildings and Structures

Soil pH, and concentrations of sulfate at the site are not considered corrosive to concrete and steel, so the beneficial use *Buildings and Structures* is not precluded by soil conditions at the site.

8.3.5 Aesthetics

There were no reported observations of materials such as brick fragments, ash and glass observed in the filling material at the site. There were no reported odours or staining. No foreign materials were reported in the natural soil.

On this basis, the Auditor concludes that the beneficial use *Aesthetics* is not precluded by soil conditions at the site.

8.3.6 Potential for Off-Site Contamination

It is considered that the soils at the site are unlikely to have caused, or have the potential to cause, off-site contamination given that, on average, soil conditions do not preclude any on-site protected beneficial uses.

8.4 Final Site Condition

No remediation was undertaken, so the final condition of the site is reflected in the assessment results reported herein.

The Auditor inspected the site on 12 July 2013, and observed that the stockpiles of crushed rock in the south west corner of the site, and which had been observed during the initial site visit, remained on site. (See photos 7 and 8, Appendix E) The Auditor had previously been led to believe that this material would be removed. Additionally, the building waste which had been present during the Auditor's initial site visit had been stockpiled on the concrete apron on the southern boundary of the site.

The site owner subsequently advised (verbally and via e-mail) that the stockpiles had been removed to the site adjoining the southern boundary of the Audit site. No documentation was available to confirm the destination of the material, or the volume of material removed, although the site owner did provide an undated photograph on 18 July 2013. (See e-mail correspondence, Appendix G)

A representative of the Auditor inspected the site again, on 21 July 2013, and confirmed that the stockpiles in question had been removed. Photographs taken at the time confirm this. (See photos 9-11, Appendix E). The Auditor confirmed, by observation on 23 July 2013, that the stockpiles were no longer on site.

8.5 Summary of Soil Contamination Impact to Beneficial Uses of Land

No beneficial uses of land are considered precluded by contamination in soil at the site.

8.6 Impact to the Groundwater Environment

Based on consideration of the site and surrounding site history and observations made during site assessment works undertaken by Diomides, the Auditor considered that groundwater contamination beneath the site was unlikely and that a direct investigation of groundwater quality would not be required by the Audit.

The soil investigation has not revealed the presence of concentrations of mobile contaminants likely to be of concern to the groundwater environment. Metals concentrations in soils, exceeding the Audit Criteria, were detected in only two isolated samples, and the pattern of their distribution does not indicate the potential for leaching into the groundwater.

8.7 Impact to the Air Environment

Based on the results of the soil assessment, the condition of the land is not expected to impact on the air environment at the site.

8.8 Conclusion of Assessment of Contamination

The final condition of the land is considered suitable for all land uses.

9. Audit Conclusions

9.1 Soil

Based on the findings of this Environmental Audit, the Auditor is of the opinion that the site in its current condition is suitable for all beneficial land uses, subject to planning approval from the relevant Planning or Responsible Authority. The Auditor considers that no clean up of the site soils is required.

9.2 Groundwater

Based on consideration of the site and surrounding site history, and observations made during site assessment works undertaken by Diomides, the Auditor considers that groundwater contamination beneath the site is unlikely and, as such, a direct investigation of groundwater quality was not required for the completion of the Audit. The soil investigation did not reveal the presence of appreciable concentrations of mobile contaminants, with the potential to reach groundwater. The groundwater conditions are considered unlikely to compromise the beneficial uses of the land.

9.3 Outcome of Auditor's Conclusions

The site is considered suitable for the following land uses, subject to compliance with relevant planning controls imposed by the City of Moreland (acting as either the Planning Authority or the Responsible Authority, as provide by the *Planning and Environment Act* 1987).

- Residential (high and low density) and other sensitive uses;
- Recreational use;
- Parks and reserves;
- Industrial or commercial use, and;
- Agriculture

Accordingly, a Certificate of Environmental Audit permitting the land uses listed above is able to be issued.

The Certificate of Environmental Audit takes into account all relevant findings and conclusions of the Audit. .

9.4 Other Information

No groundwater testing has been undertaken at the site. If groundwater is to be extracted from the site, advice should be sought from a suitably qualified person to ensure the groundwater is suitable for the intended use.

One fragment of asbestos-containing material was found on the site, and has been removed. Small quantities of bonded asbestos cement (AC) fragments may remain within the soil and be uncovered during any excavation works. These AC fragments are not expected to present a health risk to future occupiers or users of the site. If encountered during future development or use of the site, any fragment of AC should be handled and disposed in accordance with the relevant regulatory requirements.

10. References

ANZECC 1992 *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Site. Australian and New Zealand Environment and Conservation Council / National Health and Medical Research Council, January 1992.*

DCNR, 1995 *South Western Victoria Water Table Map. Victorian Groundwater Beneficial Use Map Series, Department of Conservation and Natural Resources 1995.*

Diomides 2009 *Preliminary Soil Contamination Report, 101 Hope Street, Brunswick (Reference:DA1468/CD1236) Diomides & Associates, 21 May 2009.*

Diomides 2012 *Site Contamination Report, 101-105 Hope Street, Brunswick (Reference:CD1379/DA1468) Diomides & Associates, 26 June 2012.*

GSV 1959 *1:31,680 Melbourne Map Geological Survey of Victoria 1959.*

GSV 1974 *1:63,360 Melbourne Map Geological Survey of Victoria 1974.*

GSV 1997 *1:250,000 Melbourne sheet Geological Survey of Victoria 1997.*

NEPC 1999 *National Environment protection (Assessment of site contamination) Measure 1999. National Environment Protection Council November 1999.*

Netherlands 2009 *Soil Remediation Circular 2009. Ministry of Housing, Spatial Planning and the Environment, Netherlands Government.*

NSW EPA 1994 *Guidelines for Assessing Service Station Sites. NSW Environment Protection Authority* 1994.

11. Limitations

The auditing work and reporting undertaken has been carried out to a standard of care and diligence normally expected of professional engineers and scientists practicing in the areas of contaminated land assessment and management in Victoria.

The degree of confidence in the findings and conclusions of the Environmental Audit Report (EAR) is governed by the typical limitations and constraints inherent to such audits. The audit is based on the investigations undertaken by the contamination assessment consultants as well as on the reported relevance and quality of the information and data obtained during the investigations and verification programme.

Where there are shortcomings or limitations in regard to the data obtained from the site or uncertainties in respect to the conclusions drawn from these data, such issues are identified in the EAR.

The audit undertaken reflects the condition of the site at the time of audit based on the investigations under audit. No liability can therefore be accepted for failure to identify site conditions or related environmental issues which may arise in the future from on-going site uses, or which could not have reasonably been determined or envisioned based on the scope of investigation works undertaken and the data obtained during the assessment and/or site validation. In this regard, it is noted that site conditions are determined by the consultants during the assessment and validation phase of investigations by means of both interpretative and statistical methods using data obtained during sampling, and it is noted that ground conditions between sampling locations may not be reflective of those actually sampled or analysed.

Accordingly, no liability is accepted by the auditor (or by Douglas Partners) for unidentified contamination or subsurface features or structures subsequently found to be present on the site where the investigations have been undertaken in substantial compliance with the guidelines. Moreover, site conditions may change over time and accordingly the audit represents the condition of the site at the date of the audit, and not necessarily at some unspecified time in the future.

The data used to support the conclusions reached in this Environmental Audit Report have been obtained, in part, by other consultants and have been audited with a reasonable level of scrutiny, care and diligence by the auditor. No liability can be accepted for unreported omissions, alterations or errors in the data collected and presented by the other consultants. Accordingly, the data and information presented by others are taken and interpreted in good faith by the auditor.

This EAR should not be used for purposes other than those indicated in the previous sections of this report. The report should not be reproduced without the permission of Douglas Partners Pty Ltd.

This site audit does not address the geotechnical or engineering suitability of the site and accordingly it is recommended that suitable specialist advice is obtained in this regard.

Douglas Partners Pty Ltd

Appendix A

Certificate of Environmental Audit

Douglas Partners
Geotechnics / Environment / Groundwater

ENVIRONMENT PROTECTION ACT 1970

CERTIFICATE OF ENVIRONMENTAL AUDIT

I, Paul Moritz of Douglas Partners Pty Ltd , 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 Joe Di Monte of Roden Street Pty Ltd to issue a Certificate of Environmental Audit in relation to the site located at 101 – 105 Hope Street , Brunswick and defined as Lot 1, Plan of Subdivision 626893Q, owned by Roden Street Pty Ltd;

2) had regard to, among 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)*, No S95, 2002
   - *State environment protection policy (Groundwaters of Victoria)*, No S160, 1997

   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 which 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 CERTIFY that I am of the opinion that the condition of the site is neither detrimental, nor potentially detrimental, to any beneficial uses of the site.

OTHER RELATED INFORMATION.

No groundwater testing has been undertaken at the site. If groundwater is to be extracted from the site, advice should be sought from a suitably qualified person to ensure the groundwater is suitable for the intended use.

One fragment of asbestos-containing material was found on the site, and has been removed. Small quantities of bonded asbestos cement (AC) fragments may remain within the soil and be uncovered during any excavation works. These AC fragments are not expected to present a health risk to future occupiers or users of the site. If encountered during future development or use of the site, any fragment of AC should be handled and disposed in accordance with the relevant regulatory requirements.

This Certificate forms part of environmental audit report (Douglas Partners Pty Ltd, *Environmental Audit Report- 101 – 105 Hope Street, Brunswick, Vic,* dated 30 July 2013). Further details regarding the condition of the site may be found in the environmental audit report.

Dated 30 July 2013

Signed

Paul Moritz
Environmental Auditor
(Appointed Pursuant to the *Environment Protection Act* 1970)

Attachments: Certificate of Title

Department of Sustainability and Environment
State Government Victoria
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HISTORICAL SEARCH STATEMENT Land Victoria

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Volume 11365 Folio 587
Folio Creation: Created as a computer folio
Parent titles :
 Volume 08853 Folio 874
 Volume 08874 Folio 438

STATEMENT END

VOTS Snapshot

VOLUME 11365 FOLIO 587
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LAND DESCRIPTION

Lot 1 on Plan of Subdivision 626893Q.
PARENT TITLES :
Volume 08853 Folio 874 Volume 08874 Folio 438
Created by instrument PS626893Q 21/07/2012

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RODEN STREET PTY LTD of 7 YORK PLACE CARLTON VIC 3053
PS626893Q 21/07/2012

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AG871761P 17/11/2009
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 PS626893Q FOR FURTHER DETAILS AND BOUNDARIES

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PLAN OF SUBDIVISION

STAGE No. ———

LRS USE ONLY
EDITION 1

PS626893Q
06/07/2012 $1,096.30 PS

LOCATION OF LAND

PARISH: JIKA JIKA

CROWN PORTION: 109 (PT)

TITLE REFERENCE: VOL.08853 FOL.874
VOL.08874 FOL.438

LAST PLAN REFERENCE/S: LP 089346 (LOTS 1 &2)

POSTAL ADDRESS: (At time of subdivision) No. 101-105 HOPE STREET BRUNSWICK 3056

MGA Co-ordinates (of approx centre of land in plan) E 319 835 N 5 818 360 ZONE: 55

COUNCIL CERTIFICATION

COUNCIL NAME: MORELAND CITY COUNCIL REF: SP/2009/108

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 of the Subdivision Act 1988 ~~has~~/has not been made.

(ii) The requirement has/~~has not~~ been satisfied.

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

~~(iv) The requirement has been satisfied for ....~~

Council Delegate
~~Council Seal~~
Date 19/6/2012 Signature GRAEME LOWELL Print Name

~~This plan is re-certified under Section 11(7) of the Subdivision Act 1988.~~

~~Council Delegate~~
~~Council Seal~~
~~Date / /~~ ~~Signature~~ ~~Print Name~~

VESTING OF ROADS AND/OR RESERVES

IDENTIFIER	COUNCIL/BODY/PERSON
NIL	NIL

NOTATIONS

STAGING This ~~is~~/is not a staged subdivision.
Planning permit No: SP/2009/108

DEPTH LIMITATION DOES NOT APPLY

SURVEY THIS PLAN IS / ~~IS NOT~~ BASED ON SURVEY.

OTHER PURPOSES OF THIS PLAN: 1. REMOVAL OF THE SEWER EASEMENT COLOURED BLUE AND NAMED E-1 ON LP 080707.
2. MERGER OF THE PARTY WALL EASEMENTS COLOURED YELLOW AND GREEN AND NAMED E-1 AND E-3 ON LP 089346.

GROUNDS FOR REMOVAL: MORELAND CITY COUNCIL PLANNING PERMIT No.: SP/2009/108 (as amended).

LRS USE ONLY

STATEMENT OF COMPLIANCE/ EXEMPTION STATEMENT

RECEIVED ☑ DATE 06 / 07 / 12

PLAN REGISTERED

TIME 7:42am

DATE 21/ 07 / 12

G Venn

Assistant Registrar of Titles

EASEMENT INFORMATION

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

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	PARTY WALL	0.13	THIS PLAN	RESPECTIVE ADJOINING LOTS

Land Development Consulting
Suite 20, The Clocktower
255 Drummond Street,
Carlton, 3053
Phone 9347 5655 Fax 9347 5054

LICENSED SURVEYOR(PRINT) MARK CHARLES TOMKINSON
SIGNATURE
DATE 27/1/12
REF 3403 PS
VERSION E

DATE 19/6/2012
COUNCIL DELEGATE SIGNATURE

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm

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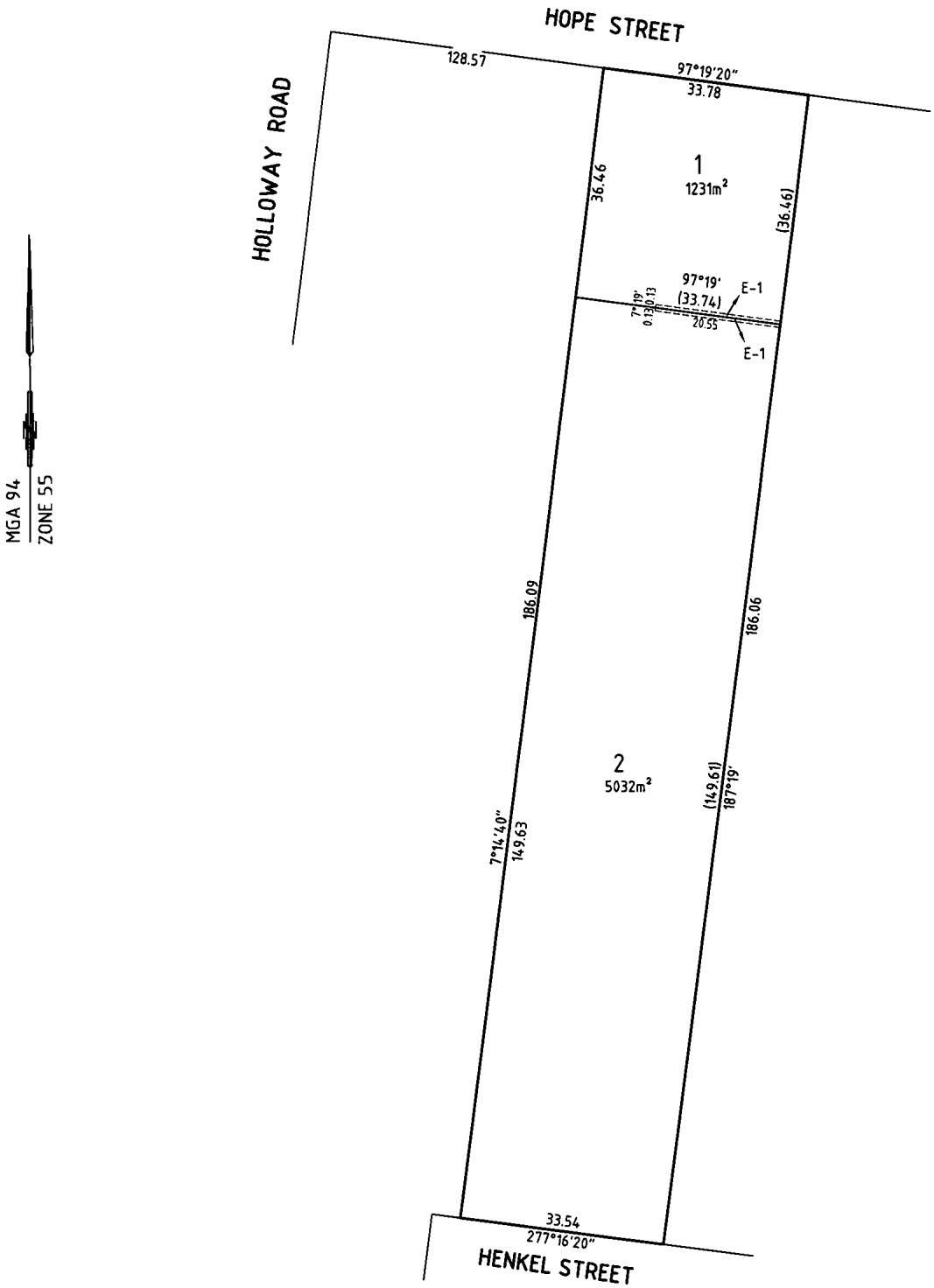
PLAN OF SUBDIVISION

STAGE No. —

PLAN NUMBER PS 626893Q



Land Development Consulting Suite 20, The Clocktower 255 Drummond Street, Carlton, 3053 Phone 9347 5655 Fax 9347 5054	SCALE 0 5 10 15 20 30 LENGTHS ARE IN METRES SCALE 1:750 ORIGINAL SIZE : A3	LICENSED SURVEYOR : MARK CHARLES TOMKINSON SIGNATURE ..... DATE 27/1/12 REF 3403 PS VERSION E	DATE 19/6/2012 COUNCIL DELEGATE SIGNATURE SHEET 2 OF 2 SHEETS

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm

Appendix B

Data Tables

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Cyanide (total)	mg/kg		750	3000	3750	50	2500	10000		< 5				< 5				< 5			
Fluoride	mg/kg					450	10000	40000		120				160				< 100			
pH (1:5 Aqueous extract)	pH Units					>4/<9				9.7				8.5				12			9.5
Sulphate (S)	mg/kg	2000								50				< 10							12
1.1.1.2-Tetrachloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.1-Trichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.2.2-Tetrachloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.2-Trichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1-Dichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2.3-Trichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2.4-Trichlorobenzene	mg/kg									< 0.2				< 0.2				< 0.2			
1.2.4-Trimethylbenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dibromoethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.3.5-Trimethylbenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.3-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.3-Dichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.4-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
2-Butanone (MEK)	mg/kg									< 0.05				< 0.05				< 0.05			
2-Propanone (Acetone)	mg/kg									< 0.05				< 0.05				< 0.05			
4-Chlorotoluene	mg/kg									< 0.05				< 0.05				< 0.05			
4-Methyl-2-pentanone (MIBK)	mg/kg									< 0.05				< 0.05				< 0.05			
Allyl chloride	mg/kg									< 0.05				< 0.05				< 0.05			
Bromobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
Bromochloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Bromodichloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Bromoform	mg/kg									< 0.05				< 0.05				< 0.05			
Bromomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Carbon disulfide	mg/kg									< 0.05				< 0.05				< 0.05			
Carbon Tetrachloride	mg/kg									< 0.05				< 0.05				< 0.05			
Chlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
Chloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
Chloroform	mg/kg									< 0.05				< 0.05				< 0.05			
Chloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
cis-1.2-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
cis-1.3-Dichloropropene	mg/kg									< 0.05				< 0.05				< 0.05			
Dibromochloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Dibromomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Dichlorodifluoromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Hexachlorobutadiene	mg/kg						2.8	11		< 0.2				< 0.2				< 0.2			
Iodomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Isopropyl benzene (Cumene)	mg/kg									< 0.05				< 0.05				< 0.05			
Methylene Chloride	mg/kg									< 0.05				< 0.05				< 0.05			
Styrene	mg/kg									< 0.05				< 0.05				< 0.05			
Tetrachloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
trans-1.2-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
trans-1.3-Dichloropropene	mg/kg									< 0.05				< 0.05				< 0.05			
Trichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
Trichlorofluoromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Vinyl chloride	mg/kg						1.2	4.8		< 0.05				< 0.05				< 0.05			
Chlorinated hydrocarbons[1]	mg/kg					1				ND				ND				ND			
Other chlorinated hydrocarbons[2]	mg/kg						10	50		ND				ND				ND			
Benzene	mg/kg					1	4	16	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Ethylbenzene	mg/kg								50	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylene	mg/kg									< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	mg/kg								130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total m+p-Xylenes	mg/kg									< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes(ortho.meta and para)	mg/kg								25	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Total BETX	mg/kg					7	70	240		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Arsenic	mg/kg	20	100	400	500	20	500	2000		15	< 2	33	2.4	2.4	5.5	6.7	2.8	< 2	2.1	3.4	< 2
Cadmium	mg/kg	3	20	80	100	3	100	400		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.5	1.2	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	mg/kg	50[A]								25	18	12	14	15	8.6	19	24	8.3	13	33	13
Chromium (hexavalent)	mg/kg	1	100	400	500	1	500	2000		< 1				< 1				< 1			

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Copper	mg/kg	100	1000	4000	5000	100	5000	20000		27	< 5	89	< 5	< 5	12	42	5.7	< 5	< 5	19	< 5
Lead	mg/kg	600	300	1200	1500	300	1500	6000		19	16	66	9	8.7	540	31	12	< 5	7.1	21	8.9
Mercury	mg/kg	1	15	60	75	1	75	300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	mg/kg					40	1000	4000		< 10				< 10				< 10			
Nickel	mg/kg	60	600	2400	3000	60	3000	12000		18	10	20	5.6	< 5	< 5	44	15	< 5	5.7	26	7.9
Selenium	mg/kg					10	50	200		< 2				< 2				< 2			
Silver	mg/kg					10	180	720		< 5				< 5				< 5			
Tin	mg/kg	50[A]				50	500			< 10				< 10				< 10			
Zinc	mg/kg	200	7000	28000	35000	200	35000	140000		14	11	62	6.1	6.7	84	150	12	10	< 5	41	7
4.4'-DDD	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
4.4'-DDE	mg/kg		200	800	1000		50	50		< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
4.4'-DDT	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
a-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Aldrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
b-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Chlordane	mg/kg		50	200	250		4	16		< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
d-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Dieldrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan I	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan II	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan sulphate	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endrin aldehyde	mg/kg									< 0.05		< 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									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Heptachlor	mg/kg		10	40	50		1.2	4.8		< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Heptachlor epoxide	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Hexachlorobenzene	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Methoxychlor	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Toxaphene	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aldrin + Dieldrin	mg/kg		10	40	50		1.2	4.8		< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Organochlorine Pesticides[3]	mg/kg					1				ND		ND		ND				ND		ND	
Other organochlorine pesticides[4]	mg/kg						10	50		ND		ND		ND				ND		ND	
2.4.5-Trichlorophenol	mg/kg									< 1				< 1				< 1			
2.4.6-Trichlorophenol	mg/kg									< 1				< 1				< 1			
2.4-Dichlorophenol	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			
4-Chloro-3-methylphenol	mg/kg									< 1				< 1				< 1			
Pentachlorophenol	mg/kg									< 1				< 1				< 1			
Tetrachlorophenols - Total	mg/kg									< 5				< 5				< 5			
Total Halogenated Phenol	mg/kg					1	10	320		< 1				< 1				< 1			
2.4-Dimethylphenol	mg/kg									< 0.5				< 0.5				< 0.5			
2.4-Dinitrophenol	mg/kg									< 5				< 5				< 5			
2-Cyclohexyl-4.6-dinitrophenol	mg/kg									< 20				< 20				< 20			
2-Methyl-4.6-dinitrophenol	mg/kg									< 5				< 5				< 5			
2-Methylphenol (o-Cresol)	mg/kg									< 0.2				< 0.2				< 0.2			
2-Nitrophenol	mg/kg									< 1				< 1				< 1			
3&4-Methylphenol (m&p-Cresol)	mg/kg									< 0.4				< 0.4				< 0.4			
4-Nitrophenol	mg/kg									< 5				< 5				< 5			
Dinoseb	mg/kg									< 20				< 20				< 20			
Phenol	mg/kg									< 0.5				< 0.5				< 0.5			
Total Non-Halogenated Phenol	mg/kg					60	560	2200		< 20				< 20				< 20			
Aroclor-1016	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1221	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1232	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1242	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1248	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1254	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1260	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Total PCB	mg/kg		10	40	50	2				< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Acenaphthene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Benz(a)anthracene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	mg/kg		1	4	5	1	5	20		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 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	< 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	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	mg/kg		20	80	100	20	100	400		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C9	mg/kg					100	650	2600	65	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C10-C14	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C15-C28	mg/kg									< 50	< 50	72	< 50	< 50	< 50	51	< 50	< 50	< 50	< 50	< 50
TRH C29-C36	mg/kg									< 50	< 50	56	< 50	< 50	< 50	100	< 50	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	mg/kg					1000	10000	40000	1000	< 50	< 50	130	< 50	< 50	< 50	150	< 50	< 50	< 50	< 50	< 50
TRH C6-C10	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Naphthalene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRH >C10-C16	mg/kg									< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)	mg/kg									< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
TRH >C16-C34	mg/kg									< 100	< 100	120	< 100	< 100	< 100	130	< 100	< 100	< 100	< 100	< 100
TRH >C34-C40	mg/kg									< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100

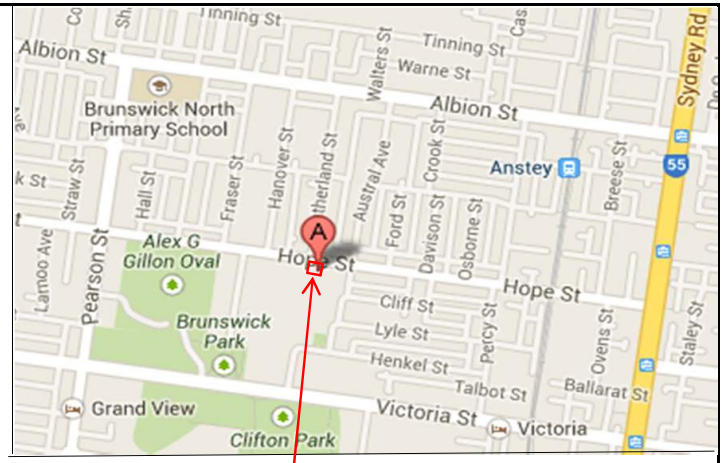
SUMMARY SOIL QUALITY CONTROL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	% RPD	Envirolab	% RPD	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH2 0.3-0.4	BLIND	BH2 0.3-0.4	SPLIT	BH2 0.3-0.4	FIELD BLANK	RINSATE
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09453	M12-My09462	vs BLIND	73186-1	vs SPLIT	M12-My09463	M12-My09464
Analyte	Unit									Natural	Natural		Natural			
Benzene	mg/kg					1	4	16	1	< 0.05	< 0.05	0	< 0.2	n/a		
Ethylbenzene	mg/kg								50	< 0.05	< 0.05	0	< 1	n/a		
o-Xylene	mg/kg									< 0.05	< 0.05	0	< 1	n/a		
Toluene	mg/kg								130	< 0.05	< 0.05	0	< 0.5	n/a		
Total m+p-Xylenes	mg/kg									< 0.1	< 0.1	0	< 2	n/a		
Xylenes(ortho.meta and para)	mg/kg								25	< 0.15	< 0.15	0	< 3	n/a		
Total BETX	mg/kg					7	70	240		< 0.3	< 0.3	0	< 4.7	n/a		
Arsenic	mg/kg	20	100	400	500	20	500	2000		2.4	2.7	-11.8	< 4*	18.2		
Cadmium	mg/kg	3	20	80	100	3	100	400		< 0.4	< 0.4	0	< 0.5	n/a		
Chromium	mg/kg	50^								14	12	15.4	11	24.0		
Chromium (hexavalent)	mg/kg	1	100	400	500	1	500	2000								
Copper	mg/kg	100	1000	4000	5000	100	5000	20000		< 5*	6.3	-86.4	7	-94.7		
Lead	mg/kg	600	300	1200	1500	300	1500	6000		9	12	-28.6	14	-43.5		
Mercury	mg/kg	1	15	60	75	1	75	300		< 0.1	< 0.1	0	< 0.1	0		
Molybdenum	mg/kg					40	1000	4000								
Nickel	mg/kg	60	600	2400	3000	60	3000	12000		5.6	5.3	5.5	5	11.3		
Selenium	mg/kg					10	50	200								
Silver	mg/kg					10	180	720								
Tin	mg/kg	50^				50	500									
Zinc	mg/kg	200	7000	28000	35000	200	35000	140000		6.1	7.3	-17.9	6	1.7		
Acenaphthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Acenaphthylene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benz(a)anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(a)pyrene	mg/kg		1	4	5	1	5	20		< 0.5	< 0.5	0	< 0.05	n/a		
Benzo(b)fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(g,h,i)perylene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(k)fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Chrysene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Dibenz(a,h)anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Fluorene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Indeno(1.2.3-cd)pyrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Naphthalene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Phenanthrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Pyrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Total PAH	mg/kg		20	80	100	20	100	400		< 0.5	< 0.5	0	< 0.1	n/a		
TRH C6-C9	mg/kg					100	650	2600	65	< 20	< 20	0	< 25	n/a		
TRH C10-C14	mg/kg									< 20	< 20	0	< 50	n/a		
TRH C15-C28	mg/kg									< 50	< 50	0	< 100	n/a		
TRH C29-C36	mg/kg									< 50	< 50	0	< 100	n/a		
TRH C10-36 (Total)	mg/kg					1000	10000	40000	1000	< 50	< 50	0	< 250	n/a		
TRH C6-C10	mg/kg									< 20	< 20	0				
TRH C6-C10 less BTEX (F1)	mg/kg									< 20	< 20	0				
Naphthalene	mg/kg									< 0.5	< 0.5	0				
TRH >C10-C16	mg/kg									< 50	< 50	0				
TRH >C10-C16 less Naphthalene (F2)	mg/kg									< 50	< 50	0				
TRH >C16-C34	mg/kg									< 100	< 100	0				
TRH >C34-C40	mg/kg									< 100	< 100	0				
Benzene	mg/L														< 0.05	
Ethylbenzene	mg/L														< 0.05	
o-Xylene	mg/L														< 0.05	
Toluene	mg/L														< 0.05	
Total m+p-Xylenes	mg/L														< 0.1	
Xylenes(ortho.meta and para)	mg/L														< 0.15	
Total BETX	mg/L														< 0.3	
TRH C6-C9	mg/L														< 20	
TRH C10-C14	mg/L														< 20	
TRH C15-C28	mg/L														< 50	
TRH C29-C36	mg/L														< 50	
TRH C10-36 (Total)	mg/L														< 50	
TRH C6-C10	mg/L														< 20	
TRH C6-C10 less BTEX (F1)	mg/L														< 20	
Naphthalene	mg/L														< 0.5	
TRH >C10-C16	mg/L														< 50	
TRH >C10-C16 less Naphthalene (F2)	mg/L														< 50	
TRH >C16-C34	mg/L														< 100	
TRH >C34-C40	mg/L														< 100	
Arsenic	mg/L															< 0.001
Cadmium	mg/L															< 0.0002
Chromium	mg/L															< 0.001
Copper	mg/L															< 0.001
Lead	mg/L															< 0.001
Mercury	mg/L															< 0.0001
Nickel	mg/L															< 0.001
Zinc	mg/L															< 0.001

Appendix C

Figures and Drawings

Site boundary

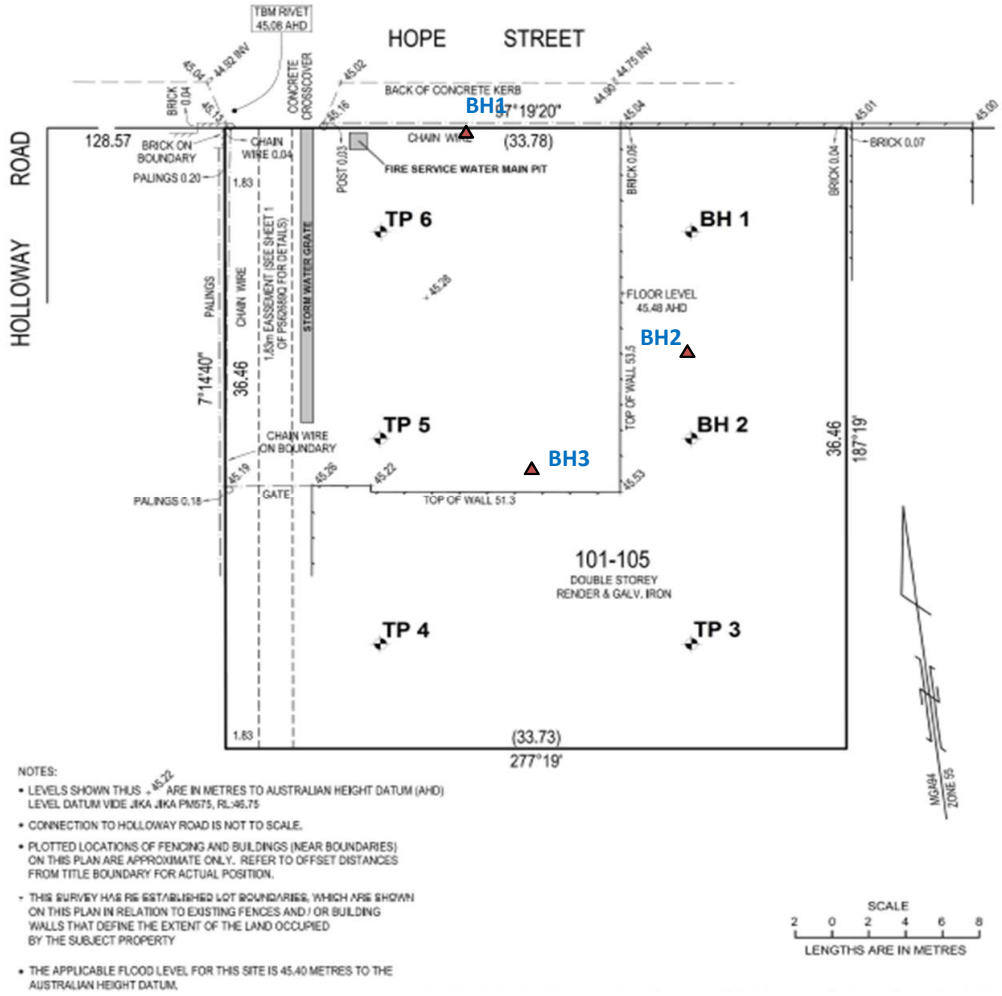


Site Location

Baseplan taken from Near Map (dated 21 Jun 2013)

20 m

Douglas Partners Geotechnics / Environment / Groundwater	Project No. 78938.00	Site Location Plan	Drawing No. 1
	Date: Jul-13	101-105 Hope Street, Brunswick Client: Roden Street Pty Ltd	Revision A



NOTES:

- LEVELS SHOWN THUS 45.22 ARE IN METRES TO AUSTRALIAN HEIGHT DATUM (AHD) LEVEL DATUM VIDE JIKA JIKA PM575, RL=46.75
- CONNECTION TO HOLLOWAY ROAD IS NOT TO SCALE.
- PLOTTED LOCATIONS OF FENCING AND BUILDINGS (NEAR BOUNDARIES) ON THIS PLAN ARE APPROXIMATE ONLY. REFER TO OFFSET DISTANCES FROM TITLE BOUNDARY FOR ACTUAL POSITION.
- THIS SURVEY HAS RE ESTABLISHED LOT BOUNDARIES, WHICH ARE SHOWN ON THIS PLAN IN RELATION TO EXISTING FENCES AND / OR BUILDING WALLS THAT DEFINE THE EXTENT OF THE LAND OCCUPIED BY THE SUBJECT PROPERTY
- THE APPLICABLE FLOOD LEVEL FOR THIS SITE IS 45.40 METRES TO THE AUSTRALIAN HEIGHT DATUM.

Note:

▲ Represents sampling locations from 2009 Diomides assessment.

⊕ Represents sampling locations from 2012 Diomides assessment.

Note: Site plan reproduced from survey plan produced by Terrain Consulting Group (drawing 10385DO1s)

Douglas Partners Geotechnics / Environment / Groundwater	Project No. 78938.00	Site Audit Area - Surveyed Plan	Drawing No.2
	Date: Jul-13	101-105 Hope Street, Brunswick Client: Roden Street Pty Ltd	Revision A

Appendix D

Environmental Site Assessment Reports

D&A

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Report

to

RODEN STREET PTY LTD

PRELIMINARY

SOIL CONTAMINATION ASSESSMENT

101 Hope Street, Brunswick, Victoria

MAY 21, 2009 DA1468/CD1236

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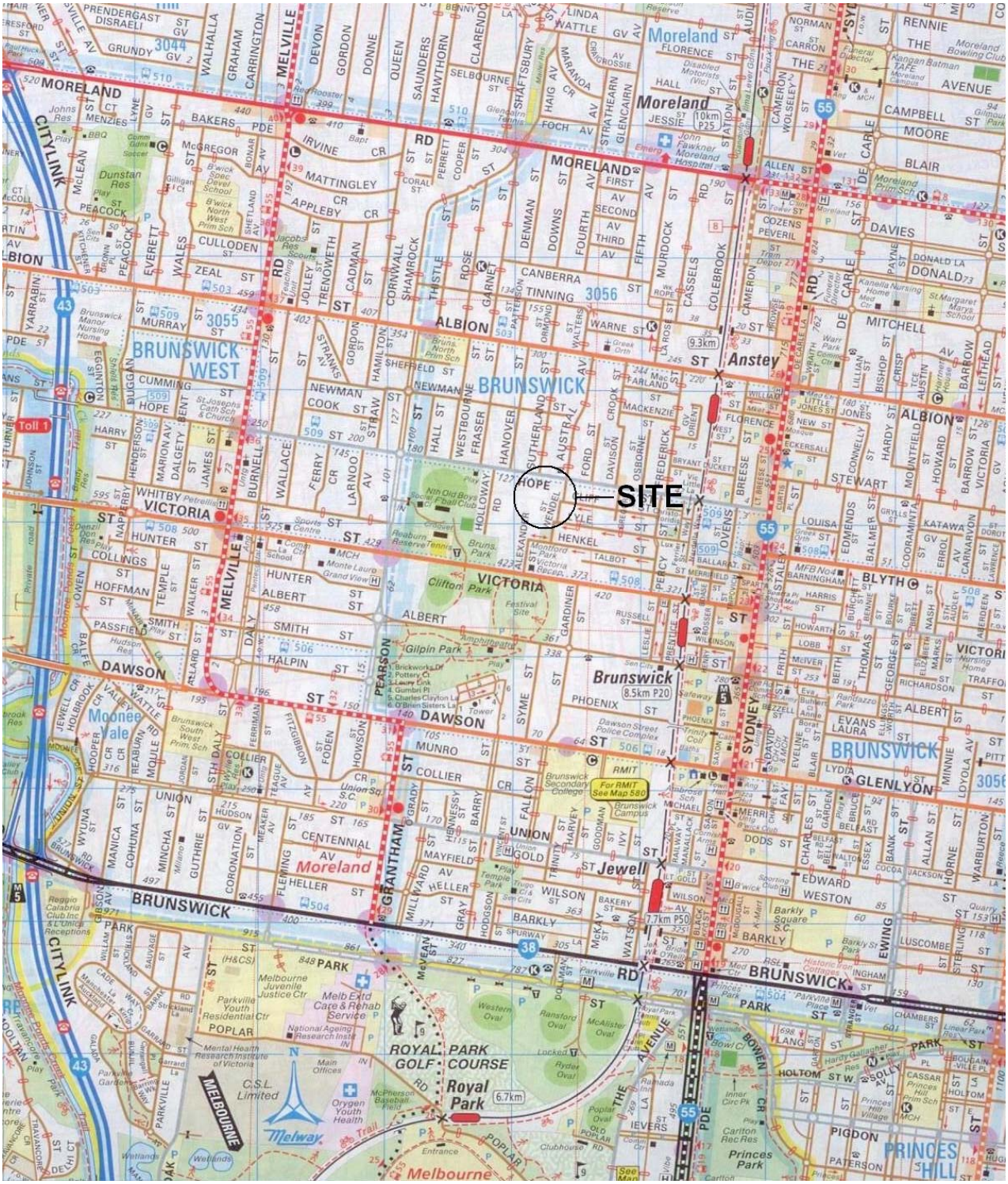
ABBREVIATIONS

AMG	Australian Map Grid
AS	Australian Standard
AST	Aboveground Storage Tank
ANZECC	Australian and New Zealand Environment and Conservation Council
BH	Borehole
BLIND	Blind Replicate Sample
BTEX	Benzene, Toluene, Ethyl benzene, Xylenes
COC	Chain of Custody
CUTEP	Cleanup to the Extent Practicable
DO	Dissolved Oxygen
EC	Electrical Conductivity
Ecowise	Ecowise Environmental (Victoria) Pty Ltd
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
GW	Groundwater Well
HIL	Health Investigation Level
LOR	Level of Reporting
mg/kg	Milligrams per kilogram
µg/L	Micrograms per litre
mg/L	Milligrams per litre
MAHs	Monocyclic Aromatic Hydrocarbons
MGT	MGT Environmental Consulting Pty Ltd
NAPL	Non-aqueous Phase Liquid
NATA	National Association of Testing Authorities
NEPM	National Environmental Protection Measure
NHMRC	National Health & Medical Research Council
OCPs	Organochlorine Pesticides
OPPs	Organophosphorus Pesticides
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Poly Chlorinated Hydrocarbon
PID	Photo Ionisation Detector
PSH	Phase Separated Hydrocarbons
QA	Quality Assurance
QC	Quality Control
RPD	Relative Percent Difference
SEPP	State Environment Protection Policy
SMHSP	Soil Management & Health and Safety Plan
SPLIT	Split Sample
SVOCs	Semi-volatile Organic Compounds
SWL	Standing Water Level
TDS	Total Dissolved Solids
TIT	Triple Interceptor Trap
TP	Test Pit
TPH or TRH	Total Petroleum Hydrocarbons or Total Recoverable Hydrocarbons
UST	Underground Storage Tank
VHC	Volatile Halogenated Compounds
VOCs	Volatile Organic Compounds

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA 1468 ---------- **DATE:** May, 2009



LOCALITY PLAN		**FIGURE 1**

1.0 INTRODUCTION

This report presents the results of a preliminary soil contamination assessment carried out by Diomides & Associates Pty Ltd for the property located at 101 - 105 Hope Street, Brunswick, Victoria. A locality plan which shows the location of the subject site has been included as Figure 1.

Diomides & Associates Pty Ltd was commissioned by Mr Joe Di Monte of Roden Street Pty Ltd to conduct a preliminary soil contamination assessment and to prepare this report. The investigations were carried out generally in accordance with the Diomides & Associates proposal dated April 24, 2009. The work was authorised by Mr Di Monte by written authorisation dated April 24, 2009.

It is understood from the information provided that the client has entered into a conditional contract to purchase the site subject to the findings of this preliminary soil contamination assessment report. The client intends to rezone an area of approximately 1,200 square metres located at the northern end of the site, from industrial 3 zone to a residential zone to allow a medium to high density residential development.

2.0 OBJECTIVES & SCOPE OF WORK

The objectives & scope of work for this project include the following:

. to conduct a site use history assessment;

. to investigate the chemical nature and general distribution of any subsurface contamination within the car park area of the subject site by implementing a preliminary drilling, sampling, and chemical analysis programme; and,

. to report on the results of investigations, including field observations, results of chemical analyses and an appraisal of the significance of any contaminant levels, and the implications of these, together with any relevant recommendations.

3.0 BACKGROUND

3.1 General

The property which is the subject of this preliminary soil contamination assessment consists of the land located at 101 – 105 Hope Street, Brunswick as defined by the Land Victoria Property Reports and the Certificate of Title documents that are attached as Appendix A. It should be noted that Diomides & Associates were instructed to conduct limited sampling on an area of approximately 1,200 square metres located at the northern end of the site (i.e. mostly car park area) of the subject site as part of the

due diligence process being conducted by the client for the purchase of the property, for a proposed medium to high density residential development of the northern section of the site.

The subject site can be identified as Lot 2 on Plan of Subdivision 89346, Volume 08874 Folio 438. The property is located on the southern side of Hope Street and is located approximately 50 metres west of Wendel Street. The subject site covers a total area of approximately 4,600 square metres, has a rectangular shape, a frontage of approximately 34 metres along Hope Street, and a depth of approximately 137 metres. See Figure 2 – Site Plan.

The site inspection carried out by Diomides & Associates in April, 2009, revealed that the subject property is located on fairly flat, inner suburban land and covers a total area of approximately 4,600 square metres. The subject site is generally flat with no obvious topographical slope. The direction of the closest water bodies to the subject site include: (i) Moonee Ponds Creek located approximately 1.5 kilometres west of the site; (ii) Merri Creek located approximately 2.7 kilometres east of the site; (iii) the Maribyrnong River located 4.7 kilometres west of the site; and, (iv) the Yarra River located approximately 5.4 kilometres south-east of the subject site. Based on topography it is considered that the surface water and local groundwater are likely to flow in a westerly to south-westerly direction.

The inspection of the subject site indicated that the site is currently occupied by an office building located in the north eastern corner of the site with a brick-paved car park located immediately west of the office building. The southern or major part of the site

is occupied by a large factory warehouse measuring approximately 100 metres long by approximately 34 metres wide. A narrow concrete driveway runs the length of the property along the western boundary. The factory warehouse is constructed of galvanised iron and has a concrete floor slab. Parts of the factory warehouse are in poor condition, especially the northern end of the warehouse, however, the concrete floor slabs all appear to be in good condition.

The warehouse is currently occupied by a sheet metal manufacturing company called B. K. Group Pty Ltd who use the site for the storage of metal supplies/products and manufacturing spouting, covers, lids, skylights and sheet metal products. On-site processes include metal grinding and sheet metal works. A no-longer used bitumen coating area was located on-site and used by the previous owners – Gatic Australia Pty Ltd. The bitumen coating process involved dipping the metal pieces into a bitumen bath from an overhead pulley/cable system. No chemicals are currently used or stored on site. Inspection of the subject site revealed the presence of a triple interceptor trap (TIT) located near the north-western corner of the front car park area of the site, however, no above or below ground storage tanks, sumps or other pits were located on-site.

In summary, the site inspection revealed:

. The entire site is currently sealed with concrete floor slabs and paving except for minor areas of garden beds located around the northern, southern and eastern perimeter of the car park area;

- A triple interceptor trap is located in the north-western corner of the front car park area;

- No chemicals currently used or stored on-site;

- No staining on surface concrete and no effected vegetation;

- Industrial operations and activities conducted on site are considered unlikely to present a significant risk of site contamination; and,

- No evidence of any other aboveground or belowground fuel storage tanks on site and no signs of any sump pits or other pits.

The inspection of the subject site did not reveal any evidence of any full or empty chemical or waste containers and did not reveal the presence of any above or below ground fuel storage tanks.

It is understood that the front section of the site which measures approximately 34 metres by 34 metres is to be subdivided and rezoned for residential purposes. It is proposed that this area will be developed for medium to high density residential purposes. The remainder of the subject site will remain an Industrial 3 Zone and will be used for commercial/industrial purposes. Development plans for the subject site were not available at the time of preparing this report.

It is understood that the Responsible Authority will require a Certificate or Statement of Environmental Audit to be issued before construction works can commence on the front section of the subject site for the purpose of a sensitive use such as residential. It is understood that a planning permit has not been issued for the subject site at this time.

The subject site is surrounded by properties with a variety of current uses including residential and commercial uses. The neighbouring properties located at the following addresses consist of properties with the following current site uses:

- 73 to 95 and 107 to 125 Hope St. = Individual residential houses;
- 72 to 128 Hope St. = Individual residential houses;
- 97-99 Hope St. = Proforce Security Services office (Commercial use);
- 28 to 44 & 17 to 35 Cliff St. = Individual residential houses;
- 40 to 74 and 21 to 55 Lyle St. = Individual residential houses;
- 57 & 76 Lyle St. = VSM and N.S.M. Food Wholesalers respectively (commercial use);
- 102 Henkel St. = B. K. Group metal manufacturers (Commercial/industrial use). Inspection revealed that this warehouse has two vent pipes that may be associated with two possible USTs located along the western wall;
- 1 Wendel St. = Unknown timber building & vacant site (Commercial use?);
- 5-13 Wendel St. = Unknown office & storage (Commercial use);
- 1 to 29 & 8 to 32 Holloway Rd. = Individual residential houses;
- 411 Victoria St. = Unknown warehouse (Commercial/industrial use);
- 415 Victoria St. = Victoria Funerals (Commercial use);

- 419 Victoria St. = Bass Foods Direct/Melbourne Meat Co. (Commercial use); and,
- 421 Victoria St. = Raychem Brunswick (Commercial/industrial use).

It would appear that none of the current uses of the neighbouring properties would warrant significant concern regarding potential off site sources of contamination impacting on the subject site considering that the mentioned properties are currently used for low risk purposes with respect to potentially contaminating land uses. The commercial/industrial properties located nearby are located a considerable distance from the site. A summary of the historical uses for the neighbouring properties is included in Section 2.2 - Site History.

3.2 Site History

In conjunction with the site inspection by an environmental specialist, a site use history assessment was conducted using information obtained from Moreland City Council, examination of the latest edition of the EPA's Priority Sites Register, the EPA's List of Issued Certificates and Statements of Environmental Audit, discussions with previous owners/occupiers, geological survey maps, aerial photographs, the Sands & McDougall Directory of Victoria, Land Victoria property report, Certificate of Title documentation, Planning scheme maps, Melbourne & Metropolitan Board of Works Plans and old maps of the area.

The certificate of title documents, attached as Appendix A, indicate that 101-105 Hope Street is currently listed under the name Branic Pty Ltd who purchased the

property in October 1995. During the period from June 1972 to October 1995 the property was listed under the name Gatic (Australia) Pty Ltd and from January 1971 to June 1972 the property was listed under the name Reljak Investments Pty Ltd.

According to the current owner, Mr. Richard Kermonde of Branic Pty Ltd, the subject site was purchased in 1995. The front section of the property is currently leased out to a consulting and training services company (Success Fast-Track) for use as an office. Previously the office was leased out to an accounting company known as Dailey & Co. Chartered Accountants. The warehouse located at the rear of the property is used by a metal manufacturing company – B. K. Group Pty Ltd who manufacture spouting, covers, lids, skylights and other metal sheet products. Metal is stored on-site and used to manufacture various metal products. The main processes used on-site include: metal grinding and sheet metal works. No chemicals are stored or used on-site. Previously the subject site was owned and occupied by Gatic Australia who operated and iron foundry on-site. Gatic Australia manufactured metal plates, covers and lids. Diomides & Associates were shown an old bitumen coating area located on-site that was used by Gatic Australia to coat metal products with a bitumen coating. The process involved dipping the metal pieces into a bitumen bath from an overhead cable/pulley system. The bitumen coating system is extremely old and is no longer used. Mr. Kermonde indicated that to his knowledge there are no aboveground or underground storage tanks located on-site and there are no sumps or pits other than a triple interceptor trap located at the front of the site in the car park area.

Diomides & Associates contacted Mr. Vern Tedge who was the production manager of Marbut Moulding Pty Ltd and worked at the subject site between the years 1913 to

1963. Mr. Tedge informed our company that Marbut Moulding first began production at the subject site in approximately 1915/1916 and used the site to manufacture timber mouldings that were used by picture framers, cabinet makers, furniture manufacturers and chapel fitters. Many years later, Marbut Moulding also established an engineering shop on-site to service there own equipment. Mr. Tedge informed Diomides & Associates that no chemicals were stored or used on-site other than paints that were used to hand paint various timber products. Marbut Moulding did not produce any waste other than timber scraps and did not conduct any other chemical processes. Mr. Tedge indicated that, prior to Marbut Moulding occupying the subject site, the site was previously used for crop growing/grazing cows and may have had two or three residential houses located on-site. Most areas surrounding the site were vacant paddocks during the early 1900's with a clay quarry located immediately south of the subject site.

Diomides & Associates contacted WorkSafe Victoria who advised that they have no records of dangerous goods storage and handling including any aboveground or underground storage tanks registered with WorkSafe for the subject site. Copies of the letters received from WorkSafe Victoria have been attached as Appendix B.

Information obtained from the Sands & McDougall Directory of Victoria indicates that from 1924 to 1974, the subject site was occupied by Marbut Moulding Pty Ltd. For the years 1904 and 1914 the subject site was not listed and presumably consisted of undeveloped land. This information would appear to be consistent with the information provided by Mr. Tedge. A summary of the Sands & McDougall Directory of Victoria has been included as Appendix C providing details of the individual listings for the site.

The Sands & McDougall Directory of Victoria was also searched in order to gain information regarding the surrounding properties to the subject site. Most properties surrounding the subject site between the years from 1904 to 1974 were mainly listed under individual private names and presumably used for residential purposes, except for a small number of commercial/industrial properties located along Hope Street and Victoria Street. Some of the commercial/industrial properties surrounding the subject site included: a brass foundry, engineering companies, a paving company, transport companies, sand supplies company, cartage contractors, brush manufacturers, an electroplating company, a communications company, boot repairers/makers, a concrete works company, iron founders, leather goods manufacturer, sawmills, nail manufacturer, wood yard, cast maker, roofing material manufacturer, motor garage and pottery companies associated with the clay quarry. A summary of the Sands & McDougall Directory of Victoria has been included as Appendix C providing details of the individual listings for the properties surrounding the subject site.

Diomides & Associates examined old maps of the area dating back to 1906, produced by the Melbourne & Metropolitan Board of Works (MMBW). Specifically, Detailed Plan No. 1902 produced in the year 1908 and Detail Plan No. 1903 produced in the year 1906 covered the subject site and indicated that the subject site was mainly vacant land with three houses occupying part of the property. There were no signs of quarries located on the subject site in 1906 and 1908, however, a number of clay quarries were located immediately to the south, south-east and south-west of the subject site. The land located immediately to the west of the subject site would appear to be vacant land. The neighbouring land to the west appears to be occupied by two residential properties followed by more vacant land. The MMBW plan is included as Appendix D.

The site use history assessment included the examination of aerial photographs dating back to 1951. The 1951 photograph indicates that the subject site consisted of a large factory warehouse that occupied almost the entire site. The 1951 aerial photograph indicates that the subject site has no visible vegetation on-site and that the neighbouring properties located immediately to the south, east and west appear to be used for commercial/industrial purposes. A large quarry is visible immediately south of Victoria Street. The neighbouring properties located north of the subject site appear to be residential properties with more residential properties located further east and west of the commercial/industrial properties surrounding the site.

The 2005 photograph indicates that the subject site is occupied by the same factory warehouse that covers most of the subject site. A separate building and car park can be seen at the front of the factory warehouse. The subject site has no visible vegetation present. The neighbouring properties immediately to the south, east and west consist of commercial/industrial properties. Neighbouring properties located further east, further west and immediately to the north of the site are used for residential purposes. There is no evidence in the 2005 photograph of any quarrying or related operations on the subject site or neighbouring sites. Copies of the 1951 and 2005 aerial photographs are attached as Appendix E.

Examination of the Environment Protection Authority's Priority Sites Register (version dated May 1, 2009) indicated that the site is <u>not</u> listed on the register. Similarly, examination of the Environment Protection Authority's list of issued Certificates and Statements of Environmental Audit dated May 1, 2009, indicated that the subject site is not listed. Certificates and Statements of Environmental Audits have been issued for

the following nearby sites, however, Diomides & Associates have not reviewed these reports as part of this assessment work:

- 107-109 Hope Street, Brunswick, February 3, 1998 (Certificate);
- 64 Hope Street, Brunswick, December 20, 2001 (Certificate);
- 21-35 Hope Street, Brunswick, Former Brunswick Gasworks Site, April 13, 2006 (Statement) & November 15, 2005 (Statement);
- 5 Holloway Road, Brunswick West, October 31, 1996 (Statement);
- 9-13 Holloway Road, Brunswick, April 14, 1997 (Statement);
- 452-462 Victoria Street, Brunswick, June 22, 2004 (Statement);
- 490-492 Victoria Street, Brunswick, August 11, 2004 (Cert. x3 & Stat. x1); and,
- 523-525 Victoria Street, Brunswick, June 9, 2004 (Statement).

A summary of the Site Use History assessment has been presented in Table 1.

Table 1. Summary of Site History for 101-105 Hope Street, Brunswick

Year	Owner	Site Use	Source of Information
Oct 1995 to current	Branic Pty Ltd	Currently the front office is leased out to a company that provides management training and consulting (Success Fast-Track). Previously leased out to an accounting company called Dailey & Co Chartered Accountants. The rear part of the factory warehouse was used for the storage and manufacture of metal products (E.g. sheet metal, spouting, covers/lids & skylights) by a company called B. K. Group Pty Ltd. The front part of the factory warehouse has remained vacant for approximately 25 years.	Certificate of Title, Aerial photographs (2005) & Communications with Mr. Richard Kermonde.

Table 1 (Cont…). Summary of Site History for 101-105 Hope Street, Brunswick

Year	Owner	Site Use	Source of Information
June 1972 to Oct 1995	Gatic (Australia) Pty Ltd	Iron foundry operated by Gatic (Australia) Pty Ltd. During the 1970's was leased by Marbut Moulding Pty Ltd.	Certificate of Title & Communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).
Jan 1971 to June 1972	Reljak Investments Pty Ltd	Leased to Marbut Moulding Pty Ltd (timber moulding makers and motor engineers).	Certificate of Title, Sands & McDougall's Directory of Victoria and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).
1924 to 1971	Unknown	Leased to Marbut Moulding Pty Ltd (timber moulding makers and motor engineers).	Sands & McDougall's Directory of Victoria, Aerial photographs (1951) and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).
1904 to 1914	Unknown	Mr. Tedge indicated that most of the site was vacant land used for crops and grazing cows with two or three houses located on-site. In 1906 & 1908 MMBW Plan show most of the site to be vacant with possibly three houses located approximately in the centre of the site. No quarries appear on subject site, however, a large quarries are located immediately south of the site.	Sands & McDougall's Directory of Victoria and MMBW Plan Nos. 1902 & 1903 and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).

3.3 Groundwater Database Search

The results of a groundwater database search carried out by Diomides & Associates are presented in this report for eleven groundwater bores located within a two kilometre radius of the subject site. Ten of these groundwater bores are located south-west of the subject site and one is located north-east of the site. Five of these bores are used for SEC unidentified use, one bore is used for dewatering purposes and the remaining five are used for groundwater investigation purposes.

According to the groundwater database search, the five closest bores are located approximately 1.07 kilometres south-west of the subject site. The bores were drilled in 1974 to total depths ranging between 2.44 to 6.1 metres below ground level and were used for unknown SEC purposes. However, no other information was reported in relation to chemical or compositional data.

The next closest bore is located approximately 1.47 kilometres south-west of the subject site. This bore was drilled in 1983 to a total depth of 3.9 metres below ground level and was used for groundwater dewatering purposes. The data for the bore indicates that the screen was installed from approximately 3 to 3.5 metres with a standing water level at 3 metres below ground level. The bore was drilled into a basalt aquifer. However, no other information was reported in relation to chemical data.

The next four closest bores are located approximately 1.62 kilometres south-west of the subject site. These bores were drilled in 1999 and 2000 to total depths of 9 to 10

metres below ground level and were used for groundwater investigation purposes. The data for these bores indicates that the screen was installed from approximately 6 or 7 metres to 9 or 10 metres below ground level. However, no other information was reported in relation to chemical or compositional data.

Further information relating to other groundwater bores was accessed from the DNRE groundwater database. However, this data was not considered to be sufficiently relevant because the bores were located further away from the subject site. Information relating to chemical and compositional data was not available for any of the additional groundwater bores and no information was available for regional aquifers that targeted deeper aquifers. A table summarising the results of the groundwater database search is attached as Appendix F.

3.4 Contaminants of Interest

Contaminants of interest associated with the past and present activities conducted on the subject site have been summarised in Table 2. It should be noted that due to the preliminary nature of this investigation not all contaminants of interest were analysed as part of this preliminary soil contamination assessment.

Table 2. Potential Contaminants of Interest

Activity	Potential Contaminants
Storage and manufacturer of metal products	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Iron foundry	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Timber moulding makers and motor engineers	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Farm land used for crops and grazing	Metals screen including mercury, hexavalent chromium, TRH, BTEX PAH, and OC pesticides.
Potentially imported fill material	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, OC pesticides, PCBs, Fluoride, Cyanide, pH, Sulphate, Phenols and Asbestos.

4.0 FIELD INVESTIGATION

4.1 General

An experienced senior environmental scientist from Diomides & Associates Pty Ltd was responsible for all fieldwork including the selection of sampling locations, collection of soil samples for soil contamination assessment, logging of soil profiles, providing field contamination readings and ensuring that all samples were delivered to the specified NATA registered analytical laboratories without delay. Directions were provided to the relevant laboratories by the Project Manager, giving details of analyses required for each sample.

4.2 Drilling of Boreholes and Sampling

On April 28, 2009, a 100 mm diameter hand auger was used to drill three boreholes at selected locations in areas were access could be obtained. The three sampling locations were selected and marked out by an environmental scientist from Diomides & Associates. The locations of all boreholes are shown in Figure 2 – Site Plan.

Each of the boreholes was drilled to depths ranging from approximately 0.5 to 0.7 metres below ground level and into natural clays in some cases. Discreet samples of soil were recovered from each of the boreholes at nominal depths of 0 to 0.15 metres and 0.4 to 0.6 metres below existing ground level. Descriptions of materials encountered and depths at which samples were collected are presented in Appendix G – Borehole logs.

In accordance with our quality assurance procedures and instructions from the Project Manager, all primary soil samples collected were analysed by MGT Environmental Consulting Pty Ltd (MGT). Due to the preliminary nature of this investigation, quality assurance samples were not recovered during the field sampling program.

In accordance with our quality assurance procedures and instructions from the Project Manager, soil samples were recovered from the hand auger. In each case the sample jar and lid were used to recover the sample and disposable latex gloves were worn by the field operators during all field work and were replaced prior to the recovery of each sample. No other sampling equipment was utilised during field investigation works. Cross contamination issues were not considered to be an issue in the field sampling stage or during the transportation stage which meant that field blanks and/or trip blanks were not considered necessary.

All samples were stored in pre-washed glass jars under cool conditions prior to delivery to the laboratory for chemical analysis. Each sample jar was clearly labelled with the following information:

- DA1468 (Job Number);
- Sample Number;
- Depth of sample; and,
- Sampling Date.

During the sampling of boreholes, particular note was taken of possible contamination, as evidenced by visual and odour criteria. A method of field contamination assessment for soil was utilised, based on these criteria. The system of classification is summarised below:

Rank	Description
0	No odour or visual evidence of contamination
1	Slight odour and/or slight visual evidence of contamination
2	Visual evidence of contamination and /or odour
3	Obvious visual evidence of contamination and/or strong odour

The rank of each soil sample is presented in Appendix G – Borehole Logs.

Measurement of volatile organic hydrocarbon concentrations was conducted using a MiniRae 2000 Photo-ionisation Detector. The procedure applied during PID screening is as follows:

1. Soil samples are collected in glass screw capped jars with the jar filled approximately half full to allow for head space;

2. The plastic screw caps are quickly replaced on the jar to prevent loss of volatiles after each sample is recovered;

3. Once all samples have been collected, the screw cap lids are quickly replaced in each case with foil that is secured in place with an elastic band to ensure an air tight seal;

4. The samples are left for fifteen minutes to allow volatile head space to accumulate; and,

5. The PID unit is used to measure the volatile head space in the sample jar by piercing a small hole in the foil lid using the probe of the PID unit. Once the PID measurement has reached a maximum concentration, the PID probe is removed and the measurement is recorded on the field log sheet for each sample.

The results of the soil vapour assessment are presented in Appendix G. A calibration certificate for the PID has been included in Appendix H. In addition, each soil sample was carefully examined for possible contamination, as evidenced by visual and odour criteria as previously discussed.

The laboratory analysis results for the soil contamination assessment samples are summarised in Appendix I and the full laboratory reports are attached as Appendix J - Laboratory Reports for Soil Samples.

5.0 CHEMICAL ANALYSES

All soil samples were submitted to MGT as the primary laboratory for analysis of all individual soil samples. MGT have advised that they are NATA registered for all chemical analyses required in this investigation. A summary of laboratory results has been presented in Appendix I for all soil samples. The full results of laboratory analyses for all soil samples are presented in Appendix J, including details of the laboratory quality assurance procedures in all cases.

The range and number of chemical analyses performed on soil samples for this investigation are indicated in Table 3.

TABLE 3. Range and Number of Chemical Analyses Performed

Constituent	**Soil Samples**
Antimony	6
Arsenic	6
Beryllium	6
Cadmium	6
Chromium (Total)	6
Cobalt	6
Copper	6
Lead	6
Mercury	6
Molybdenum	6
Nickel	6
Selenium	6
Silver	6
Tin	6
Zinc	6
PAH	6
TRH	6
BTEX	6
Organochlorine Pesticides	3
PCBs	3
Asbestos	1

6.0 RESULTS OF INVESTIGATION

6.1 Geology & Hydrogeology

The 1-250,000 Geological Survey of Victoria Melbourne Sheet indicates that the subject site is underlain by silty clays and boulders derived from the underlying basalt of the Quaternary Aged Newer Volcanics.

Hydrogeological information obtained from the Department of Sustainability and Environment – Groundwater in Metropolitan Melbourne indicates that this area of Brunswick is within the Newer Volcanics – Basalt aquifer. The aquifer depth typically ranges from the surface down to approximately 200 metres. Common salinity ranges for this particular aquifer range between approximately 3,500 to 13,000 mg/L TDS. Typical bore yields within this aquifer range between approximately 0.5 to 3 L/sec, however, typically the yield is less than 1 L/sec. Groundwater uses within this aquifer include water for livestock, however, the water is not suitable for garden use.

6.2 Subsurface Conditions

The investigation of subsurface conditions conducted during the soil contamination assessment for this project found that the subject site is overlain by variable depths of fill material. Underlying the surface, in most cases, was a layer of fill which variously contained light grey to brown silty clay. The fill material extended down to depths of 0.2 to greater than 0.7 metres below ground level.

In some cases the site fill was penetrated and was underlain by the anticipated light brown residual basaltic clays. The subsurface conditions encountered in each of the borehole logs are presented in Appendix G. The results of the field ranking based on visual and olfactory assessment conducted during the soil sampling program are also included in Appendix G.

6.3 Results of Chemical Analyses

The results of chemical and other analyses of individual soil samples indicated:

- a single piece of cement sheeting recovered from BH 2 at a depth of 0.6 metres confirmed to contain chrysotile asbestos fibres;

- total arsenic concentrations ranging from below the method detection limit of 2 mg/kg in BH 2 at a depth of 0 to 0.15 metres in fill material and BH 3 at a depth of 0.4 metres in natural soil, up to 6.4 mg/kg in BH 1 at a depth of 0.6 metres and BH 3 at a depth of 0 to 0.15 metre both in fill material;

- total cadmium concentrations ranging from below the method detection limit of 0.5 mg/kg in most individual samples, up to 0.7 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

- total chromium concentrations ranging from 14 mg/kg in BH 1 at a depth of 0 to 0.15 metres in fill material, up to 25 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

. total cobalt concentrations ranging from below the method detection limit of 5 mg/kg in BH 1 and BH 3 both at depths of 0 to 0.15 metres in fill material, up to 10 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

. total copper concentrations ranging from below the method detection limit of 5 mg/kg in BH 3 at a depth of 0.4 metres in natural soil, up to 56 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

. total lead concentrations ranging from 15 mg/kg in BH 2 at a depth of 0 to 0.15 metres in fill material, up to 100 mg/kg in BH 1 at a depth of 0.6 metres in fill material;

. total nickel concentrations ranging from 8.4 mg/kg in BH 3 at a depth of 0.4 metres in natural soil, up to 22 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

. total zinc concentrations ranging from 12 mg/kg in BH 2 at a depth of 0 to 0.15 metres in fill material, up to 230 mg/kg in BH 2 at a depth of 0.6 metres in fill material;

. concentrations of benzo(a)pyrene ranging from below the method detection limit of 0.1 mg/kg in most individual samples, up to 0.6 mg/kg in BH 1 at a depth of 0.6 metres in fill material;

. concentrations of total polycyclic aromatic hydrocarbons ranging from below the method detection limit of 0.1 mg/kg in BH 2 at a depth of 0 to 0.15 metres in fill material and BH 3 at a depth of 0.4 metres in natural soil, up to 7.1 mg/kg in BH 1 at a depth of 0.6 metres in fill material; and that,

. concentrations of all other contaminants measured in individual samples were below the respective method detection limits, except for individual polycyclic aromatic hydrocarbons.

7.0 DISCUSSION OF RESULTS

The guidelines for performance of a site contamination assessment which apply in Australia are those published in the "National Environment Protection (Assessment of Site Contamination) Measure 1999, plus the "Guidelines for the Assessment and Management of Contaminated Sites" (January 1992), Australian and New Zealand Environment Council, and the National Health and Medical Research Council (NH&MRC) known as the ANZECC guidelines.

In performing the soil contamination assessment work for this project, Diomides & Associates Pty Ltd has had regard to the State Environment Protection Policy (Prevention and Management of Contaminated Land) and various guidelines including the National Environment Protection Measure (NEPM), the ANZECC guidelines, the Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit, and the Australian Standard - Guide to the

sampling and investigation of potentially contaminated soil, AS 4482.1 - 2005 and AS 4482.2 - 1999. The results of the chemical analyses have been compared with the soil investigation levels adopted under the NEPM guidelines.

In accordance with the NEPM guidelines, Diomides & Associates has adopted the Ecological Investigation Levels (EILs) for an urban setting, the Health Investigation Level A (HIL A) which apply for 'standard' residential use with garden/accessible soil, Health Investigation Level D (HIL D) which applies for residential use with minimal opportunities for soil access, plus the NSW EPA Guidelines for Assessing Service Station Sites for petroleum hydrocarbon levels in soil. The results of all chemical analyses conducted during this investigation have been compared with these criteria.

Section 2.0 of EPA Information Bulletin, Publication 448.3 titled "Classification of Wastes", covers Fill Material and provides a Table 2 titled, "Maximum Concentrations of Contaminants Allowed in Soil to be Disposed of as Fill material". The Information Bulletin states, "Contaminant levels must be below those specified in Table 2, otherwise the material must be classified as prescribed waste. The results of chemical analyses conducted during this investigation have also been compared with these criteria.

MGT carried out internal quality assurance procedures involving the analysis of spike and duplicate soil samples. For this investigation, MGT reported internal duplicate relative percent difference (RPD) values between <1 % and 20 % with one hundred percent of duplicate RPD values within the +/- 50 % acceptance criteria. Percentage spike recovery values ranged from 71 % to 130 % with

approximately 93.0 % of percentage spike recovery values within the 75 to 125 % acceptance criteria. Diomides & Associates believe that most method blanks and surrogates reported by MGT are within the required acceptable limits as required by their NATA accreditation. Laboratory results for all soil samples are attached as Appendix J.

Contaminant occurrences are presented in Appendix I which show any elevated concentration in shaded format, indicating that a particular contaminant is above one or more of the adopted criteria.

Analysis of the data collected during this investigation indicates that:

- Fill material identified by individual sample BH 2 at a depth of 0.6 metres exhibited elevated concentrations of zinc above NEPM EIL and EPA clean fill criteria. In addition, a small piece of cement sheeting was identified to contain chrysotile asbestos fibres. It is considered that this soil will not pose a significant health risk to future residents or ecological receptors if the entire area of the site will be sealed under concrete slabs and paving. Should this soil be removed off site, it will not meet EPA requirements for disposal as clean fill and will be classified prescribed waste - Category C contaminated soil; and that,

- All other fill and natural soil samples recovered from the subject site complied with the adopted criteria;

8.0 CONCLUSIONS AND RECOMMENDATIONS

In accordance with the agreed scope of work for this preliminary soil contamination assessment, the presence and extent of any contaminants have been reported and compared with applicable site contamination guidelines. Analysis of the data collected during this project to determine the relevance of soil contamination - particularly within any fill material found within the car park area of the site - indicates that some of the fill material is contaminated.

The contaminants identified within the site could present possible risks to the health and safety of workmen during any future construction work on site, or during repair or replacement of underground services, or when working in, or excavating material within the site. In addition, the existing contaminants could present possible risks to the environment, unless appropriate site contaminant management measures are put into place or clean-up of some areas of the site is undertaken. However, if these contaminants remain sealed under concrete slabs or pavements, it is considered that they will not pose a significant risk to any future residents if the site is to be used for medium to high density residential purposes.

We must advise in this regard, however, that before the relevant area of the subject site can be used for residential purposes or other similar sensitive use, a comprehensive contamination assessment must be carried out and a Certificate or Statement of Environmental Audit must be obtained in accordance with Part IXD of the Environment Protection Act 1970 of Victoria, for the relevant area of the subject site.

Provided that appropriate records are kept and appropriate precautions are taken when working with soil sealed under the concrete slabs and pavements of the subject site, it is considered that the implications of this preliminary soil contamination assessment with respect to the proposed development of the front or northern section of the subject site for residential use include the following:

. negligible, or low risks to health and safety of workmen due to soil contamination during any construction work on site, or during repair or replacement of underground services, provided that appropriate precautions are taken when working in, excavating, or disposing of soil located under proposed capped concrete floor slabs and paving as soil from some areas of the site will not meet Environment Protection Authority (EPA) criteria for disposal as clean fill and will be classified as prescribed waste;

. negligible, or no adverse effects to health and safety of future residents and visitors, and especially young children, if this area of the site is to be used for medium to high-density residential purposes with all soil capped under concrete floor slabs and pavements; and,

. negligible or no adverse effects on the surrounding environment due to any leaching of contaminants present in soil, into road side drains or into groundwater.

Based on the results of this preliminary soil contamination assessment, the nature and extent of the contamination found, and the possible risks identified, clean up of fill

material from the site is not considered necessary for a medium to high density residential redevelopment of the front section of the site provided that all soil on site is sealed under concrete floor slabs and pavements.

However, aside from reporting the presence of any contaminants found, carrying out a comparison of the data collected with appropriate contamination guidelines, and carrying out a qualitative risk assessment, the task of conducting any quantitative risk assessment for the contaminant concentrations encountered is outside the scope of work for this project.

Appropriate precautions need to be taken when working in, excavating, or disposing of fill material from the subject site, as fill from some areas of the subject site will not meet Environment Protection Authority criteria for disposal as clean fill and may be classified as prescribed waste – Category C Contaminated Soil.

It is strongly recommended therefore that any proposed excavation and disposal of site soil including material from excavation of trenches for underground services, foundations, bulk excavations, stockpiling, shoring, piling, landscape works, etcetera, be carried out under the supervision of Diomides & Associates or other suitably qualified professionals, who can ensure that prevailing guidelines for the handling and disposal of contaminated soil are adhered to.

Based on the findings of this preliminary soil contamination assessment our company's extensive experience with many similar projects, we advise that following the demolition and removal of all buildings and pavements from the front area of the site, it will be

necessary to conduct a grid based Phase 2 site contamination assessment in accordance with Australian Standard - Guide to the sampling and investigation of potentially contaminated soil - AS 4482.1 - 2005 and AS 4482.2 – 1999, involving the excavation of test pits, the collection and chemical analysis of soil samples, and the preparation of a formal report to provide comprehensive information regarding the nature and extent of contaminated soil or fill which is present within the boundaries of the relevant area of the subject site.

Given the presence of the triple interceptor trap (TIT), it is possible that oils, fuels or solvents may have leaked from the TIT into the soil and fill material. Given the proposed use of the front area of the site for residential purposes, it will therefore also be necessary following the demolition and removal of buildings and pavements from the subject area, to excavate and remove the TIT along with any petroleum hydrocarbon contaminated soil under professional supervision. It will also be necessary to design and implement adequate sampling of the cleaned up area, the resultant spoil stockpile and residual soils to validate clean up of the TIT area.

Through our company's extensive experience with hundreds of site contamination projects, we regularly engage and supervise a number of experienced contractors who work almost exclusively on the clean up and remediation of contaminated sites, including removal of fuel tanks, triple interceptor traps and other structures. Our company can therefore provide a complete service for any projects involving site contamination issues, and consequently achieve significant cost savings.

9.0 LIMITATIONS OF THIS REPORT

Soil and rock formations are variable. The soil logs indicate what are considered to be the prevailing subsurface conditions within the site. Boundaries between zones on the logs are often not distinct, but rather are transitional and have been interpreted. The precision with which subsurface conditions are indicated depends largely on the frequency and method of sampling, and the uniformity of subsurface conditions.

A site contamination assessment necessarily involves the investigation of subsurface conditions at a site for a limited number of locations and the interpretation of data collected from a specified range of analyses, and a limited number of soil samples recovered from those locations. Chemical conditions described in this report refer only to those conditions indicated by analysis of soil samples obtained at the points and under the circumstances noted in the report and are relevant only to the conditions which pertained at the time of this investigation. These conditions may vary due to the variability of contaminant concentrations in soil as a consequence of activities on the site or adjacent sites.

Should there be revealed at some future time that contaminant concentrations in soil encountered at the site differ significantly from those indicated by the results in this report, either due to natural variability of sub surface conditions or above ground activities, it is strongly recommended that Diomides & Associates Pty Ltd be notified of the differences and provided with an opportunity to assess the significance of such differences and to provide appropriate advice.

Due care and skill have been applied in carrying out and reporting on this work. The findings, conclusions and comments contained in this report represent professional estimates and opinions and are not to be read as facts unless the context makes it clear to the contrary. In general, statements of fact are confined to statements as to what was done and/or what was observed. Other statements have been based on professional judgement.

This report is prepared solely for the use of the person, company or organisation to whom it is addressed and must not be reproduced in whole or in part or included in any other document without our expressed permission in writing. No responsibility or liability is accepted to any third party for any damages howsoever arising out of the use of or reliance on the whole or any part of this report by any third party.

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DIOMIDES & ASSOCIATES PTY LTD

DR COSTA DIOMIDES
Senior Environmental Scientist

STEPHEN DIOMIDES
Director
Lead Environmental Auditor – Site Contamination
Certificate No. 005455
RABQSA Register of Certified Auditors

10.0 REFERENCES

- Australian and New Zealand Environment and Conservation Council (ANZECC)/National Health and Medical Research Council (NHMRC), Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, 1992.

- Dutch Environment Ministry, Dutch Target and Intervention Values, February 2000.

- EPA NSW, Contaminated Sites - Guidelines for Assessing Service Station Sites, 1994.

- EPA Victoria, Classification of Wastes, EPA Information Bulletin, Publication 448.3, 2007.

- EPA Victoria, Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit, Publication 759b, 2002.

- Geological Survey of Victoria, 1-250,000 Geological Map Series – Melbourne, May 1997.

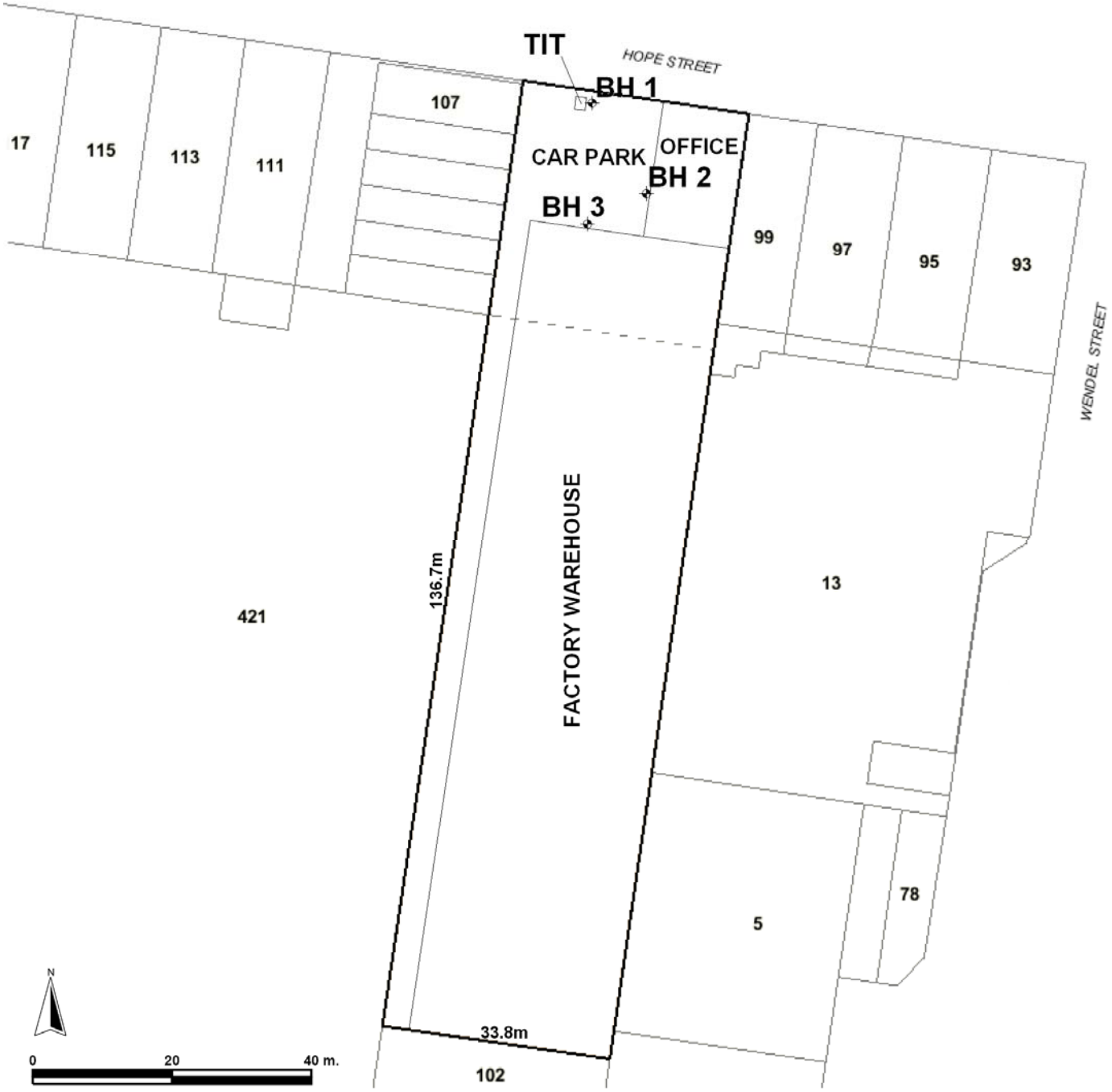
- National Environment Protection Council, National Environment Protection (Assessment of Site Contamination) Measure 1999.

- Standards Australia, Australian Standard - Guide to the sampling and investigation of potentially contaminated soil, Part 1: Non-volatile and Semi-volatile Compounds, AS 4482.1 – 2005.

- Standards Australia, Australian Standard - Guide to the sampling and investigation of potentially contaminated soil, Part 2: Volatile Substances, AS 4482.2 – 1999.

- State Environment Protection Policy (Prevention and Management of Contaminated Land), 2002.

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB No** DA 1468 ---------- **DATE:** May, 2009



SITE PLAN		**FIGURE 2**

APPENDIX A

LAND VICTORIA PROPERTY REPORT &

CERTIFICATE OF TITLE DOCUMENTS

Property Report from www.land.vic.gov.au on 12 May 2009 05:07 PM

Address: 101-105 HOPE STREET BRUNSWICK 3056
Lot / Plan: Lot 2 LP89346
SPI (Standard Parcel Identifier): 2\LP89346
Local Government (Council): MORELAND **Council Property Number:** 81069
Directory Reference: Melway 29 F6

Parcel Details

Lot/Plan or Crown Description	SPI
Lot 2 LP89346	2\LP89346

State Electorates

Legislative Council: NORTHERN METROPOLITAN (2005)
Legislative Assembly: BRUNSWICK (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: CITIPOWER (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zone:	INDUSTRIAL 3 ZONE (IN3Z)
	SCHEDULE TO THE INDUSTRIAL 3 ZONE
Planning Overlay:	SPECIAL BUILDING OVERLAY (SBO)
	SPECIAL BUILDING OVERLAY SCHEDULE (SBO)

Further Planning Information

Planning scheme data last updated on 7 May 2009.

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, local, particular and general provisions of the local planning scheme that may affect
the use of the land can be obtained by contacting the local council or by visiting Planning Schemes Online

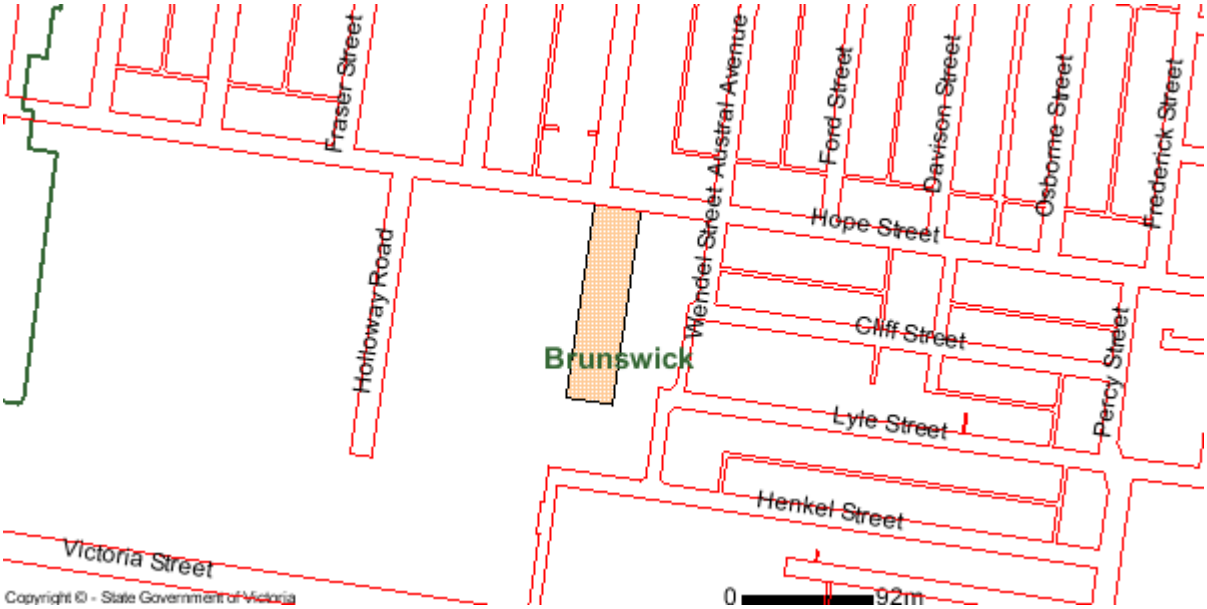
This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987.

To obtain a **Planning Certificate** go to Titles and Property Certificates

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

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

Area Map



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480206

ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

VICTORIA

REGISTER BOOK

VOL. 8874 FOL. 438

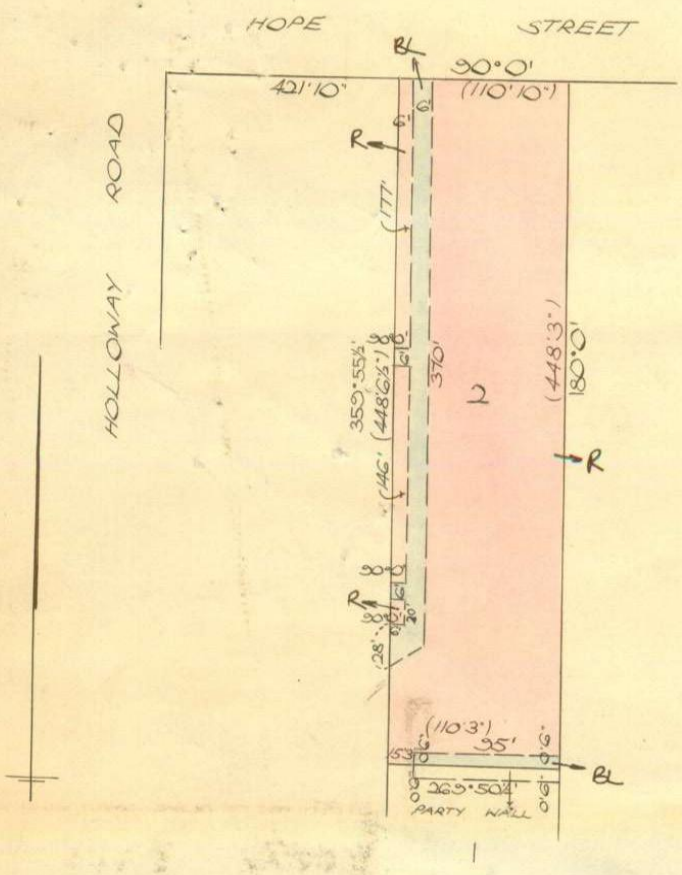
Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

VOL. 8874 FOL. 438

RELJAK INVESTMENTS PROPRIETARY LIMITED of 1-9 Palmerston Crescent - - South Melbourne is now the proprietor of an estate in fee simple - - subject to the encumbrances notified hereunder in ALL THAT piece of -- land delineated and coloured red and blue on the map in the margin - - being Lot 2 on Plan of Subdivision No.89346 Parish of Jika Jika - - - County of Bourke -

DATED the 26th day of January 1971



MEASUREMENTS ARE IN FEET AND INCHES.

V W Howden

Assistant Registrar of Titles

OFFICE OF TITLES VICTORIA

ENCUMBRANCES REFERRED TO

MORTGAGES A12604 A472660 - and B917354 - - - - - - - - - - -

As to the land coloured blue --

THE EASEMENTS (if any) existing over the same by virtue of - -- Section 98 of the Transfer of - Land Act - - - - - - - - - - - - -

THE ABOVE MORTGAGES ARE DISCHARGED 28 JUN 1972

OFFICE OF TITLES C.H.S. VICTORIA

Derived from Vol.8719 Fol.266
D944669

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Registered 2nd February 1971
No. D949065

DISCHARGED 28 JUN 1972

OFFICE OF TITLES G.H.S. VICTORIA

OFFICE OF TITLES R. L. VICTORIA

GATIC (AUSTRALIA) PROPRIETARY LIMITED of 11 Holloway Road Brunswick is now the proprietor.
Registered 28th June 1972
No.E437950

OFFICE OF TITLES C.H.S. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 28th June 1972
No.E437951

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES C.H.S. VICTORIA

MORTGAGE to RELJAK INVESTMENTS PROPRIETARY LIMITED
Registered 7th July 1972
No.E449432

DISCHARGED

OFFICE OF TITLES G.P.M. VICTORIA

OFFICE OF TITLES W.M.S. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 19th October 1977
No.G831586

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES W.M. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 4th March 1980
No.H891404

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES F.W.M. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 27th October 1982
No.K138161

Discharged as to part being the within mortgage 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES A.S. VICTORIA

MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED
Registered 13 JAN 1993
No. S308026G

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES S.R. VICTORIA

CAVEAT

CAVEATOR: BOMO INVESTMENTS PTY. LTD.
CAPACITY: MORTGAGEE
DATE OF CLAIM DOCUMENT: 30/1/95
LODGED BY: ELWYN DELVES
NOTICE TO: 1ST FLOOR 369 BRIDGE RD. RICHMOND 3121
NO.: T567858C
DATE: 22/2/95

OFFICE OF TITLES P.M.C. VICTORIA

CAVEAT WITHDRAWN
As to the within land
26/10/95

OFFICE OF TITLES J.E.O. VICTORIA

PROPRIETOR
BRANIC PTY. LTD.
102 HENKEL ST. BRUNSWICK 3056

T929663H/64E 26/10/95

OFFICE OF TITLES D.M.L. VICTORIA

T08874-438-1-1

MORTGAGE
WESTPAC BANKING CORPORATION

T929665B 26/10/95

OFFICE OF TITLES D.M.L. VICTORIA

CAVEAT NO. U156665T LODGED 21-12-95

CAVEAT WITHDRAWN
30 JAN 1996

OFFICE OF TITLES P.F. VICTORIA

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APPENDIX B

WORKSAFE LETTER

GPO Box 4293 Melbourne VIC 3001
Tel/ 1300 852 562 Fax/ 1800 060 727
Email/ licensing@worksafe.vic.gov.au
worksafe.vic.gov.au

Reference: H09/00121

4 May 2009

Costa Diomides
Senior Environmental Scientist
Diomides & Associates Pty Ltd
11 Conway Avenue
DONVALE VIC 3111

Dear Mr Diomides

Your Ref: Dangerous Goods Database Search at

101 Hope Street Brunswick

I refer to your fax received 16 April and 28 April and confirm that we have searched our database records for the above address. I advise that WorkSafe Victoria has no record of Dangerous Goods Storage and Handling at the above premises and a printout is attached.

For queries on this matter, please do not hesitate to contact the Licensing Branch on telephone 1300 852 562 or facsimile 1300 060 727.

Yours sincerely

Rachael Griffin
Senior Licensing Officer
WorkSafe Victoria

Encl.
APPROVE screen print
Result: No records

LET007/05/01.08

No records for 101 Hope Street Brunswick

Reflection for the Web - Mainframe

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OPSE10N    SRCHENQ        Occupational Health & Safety              04/05/2009
OPSE10M1   T310RAG        Approval & Licensing System                 09:11:12
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|                                                                               |
|   Action   Full Address                                                       |
|      _     101 HOPE STREET, BRUNSWICK 3056                                    |
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|      _       |                                               |                |
|      _       |                W A R N I N G                  |                |
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APPENDIX C

SUMMARY OF SANDS & MCDOUGALL DIRECTORY OF VICTORIA

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1974	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Norris, L. R.*
	9 Alexander St.	*Denson (Aust.) Pty Ltd (Anti corrosive tapes)*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*Tyler, G. W. Pty Ltd (Electrical contractor)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67-67a Hope St.	*Bastow Engineering (Engineers)*
	69 Hope St.	*Storage*
	71-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93 Hope St.	*Ranfaldi, S.*
	95 Hope St.	*Caruto, T. C. (Paving)*
	93-99 Hope St.	*Rex Fast Freight Transport Service*
	101-109 Hope St.	**Marbut Moulding Pty Ltd**
	111 Hope St.	*Delco, P.*
	111 Hope St.	*Hindle, Mrs. B. (Sandwich bar)*
	113-123 Hope St.	*Individual Private Residences*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-76 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1974 (Cont…)	Victoria St. (North Side)	
	381-385 Victoria St.	*Parterio Holding Pty Ltd*
	381-385 Victoria St.	*L. D. Transport Co Pty Ltd (Transport service)*
	381-385 Victoria St.	*Southern Sand & Gravel Pty Ltd (Sand supplies)*
	381-385 Victoria St.	*Parterio Contracts Pty Ltd (Cartage contractors)*
	387 Victoria St.	*Leslie, B. N. (Confectioner)*
	389-391 Victoria St.	*Parterio, L. (Sand supplies)*
	393-395 Victoria St.	*Parterio Holding Pty Ltd (Storage)*
	397 Victoria St.	*McFee Construction Engineering Pty Ltd (Engineers)*
	399-417 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	405 Victoria St.	*Hanson, W. (Caretaker)*
	- Int. Alexander St. -	
	419-423 Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	425 Victoria St.	*Cain, A.*
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*
1964	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Norris, L. R.*
	9 Alexander St.	*Arnold, B.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, P. (Butcher)*
	112-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, M. J. (Grocer)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1964 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67-67a Hope St.	*Bastow Engineering (Engineers)*
	67-67a Hope St.	*Gatens, G. (Electroplaters)*
	69 Hope St.	*Not available*
	71-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-99 Hope St.	*Not available*
	101-109 Hope St.	**Marbut Moulding Pty Ltd**
	111 Hope St.	*Dwyer*
	111 Hope St.	*Allan's Sandwich Bar*
	113-125 Hope St.	*Individual Private Residences*
	127 Hope St.	*Plane, E. C. (Confectioner)*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*
	Victoria St. (North Side)	
	379-387 Victoria St.	*Individual Private Residences*
	389-391 Victoria St.	*Storage*
	393-395 Victoria St.	*Muir, E. W.*
	397 Victoria St.	*Parterio, L. (Sand supplies)*
	397 Victoria St.	*Pye Communication Services*
	399-417 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	405 Victoria St.	*Hanson, W. (Caretaker)*
	- Int. Alexander St. -	
	419-423 Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	425 Victoria St.	*Hurrell, A. (Greens keeper)*
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1954	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Innis, F.*
	9 Alexander St.	*Hastings, R. E.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, P. (Butcher)*
	112-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, Miss. M. J. (Grocer)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67 Hope St.	*Johns, E. (Boot repairer)*
	69-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	99 Hope St.	*Buckland's Concrete Works Pty Ltd*
	101-109 Hope St.	**Marbut Pty Ltd (Motor engineers)**
	111-123 Hope St.	*Individual Private Residences*
	125 Hope St.	*Trower, H. F. (Grocer)*
	127 Hope St.	*Smith, R. (Confectioner)*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1954 (Cont…)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *64 Victoria St.* *68-112 Victoria St.* *114 Victoria St.* *116-118 Victoria St.* *120-123 Victoria St.* *126 Victoria St.* *140 Victoria St.* *142-153 Victoria St.* *- Int. Alexander St. -* *156 Victoria St.* *- Brunswick Park & Recreation Reserve -* *- Brunswick Bowling & Crqt Clubs -* *- Reaburn Reserve -* *- Int. Pearson St. -* <u>Wendel St.</u>	 *R.S.S.I.L.A. Memorial Hall* *Individual Private Residences* *Curry, Mrs. T. G. (Confectioner)* *Individual Private Residences* *Mitchell T & Co. Pty Ltd (Factory)* *Hanson, W. (Caretaker)* *Harvey, T.* *Mitchell T & Co. Pty Ltd (Brass foundry)* *Melbourne Pottery Co. Pty Ltd* *No listing*
1944/45	<u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *7 Alexander St.* *9 Alexander St.* <u>Cliff St. (North Side)</u> *2 – 44 Cliff St.* <u>Cliff St. (South Side)</u> *1 – 35 Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *92-104 Hope St.* *- Int. Austral Ave. –* *106-110 Hope St.* *112 Hope St.* *112-116 Hope St.* *- Int. Sutherland St. –* *118 Hope St.* *188a-130 Hope St.* *- Int. Hanover St. –* *134-146 Hope St.* *- Int. Fraser St. –*	 *Howard, M. W. C.* *Applin, H. J.* *Individual Private Residences* *Individual Private Residences* *No listing* *Individual Private Residences* *Individual Private Residences* *Cleeve, P. (Butcher)* *Individual Private Residences* *O'Meara, R. G. (Grocer)* *Individual Private Residences* *Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1944/45 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Kennedy, Mrs. E. E. (Library)*
	67 Hope St.	*Johns, E. (Boot repairer)*
	67a Hope St.	*Adams, R. (Brass foundry)*
	69-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	99 Hope St.	*Buckland's Concrete Works Pty Ltd*
	101-109 Hope St.	**Marbut Pty Ltd (Motor engineers)**
	109a Hope St.	*Gatic Engineering Pty Ltd (Iron founders engineers)*
	111-123 Hope St.	*Individual Private Residences*
	125-127 Hope St.	*Armstrong & Shutler Grocers & Confectioners*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	64 Victoria St.	*R.S.S.I.L.A. Memorial Hall*
	68-76 Victoria St.	*Individual Private Residences*
	78 Victoria St.	*Borrett, G. T. (Leather good manufacturers)*
	80-118 Victoria St.	*Individual Private Residences*
	120-124 Victoria St.	*Mitchell T & Co. Pty Ltd (Sawmills)*
	126 Victoria St.	*Spicer, H. T.*
	128-136 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	138-140 Victoria St.	*Individual Private Residences*
	142-144 Victoria St.	*Private garage*
	152 Victoria St.	*Mitchell T & Co. Pty Ltd (Nail manufacturers)*
	- Int. Alexander St. -	
	Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1934	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Wright, C. J.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St.	*Bucklland Reinforced Concrete Works Pty Ltd*
	- Int. Hope St. –	
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	- Int. Hope St. –	
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, F. H. (Butcher)*
	114-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, R. G. (Grocer)*
	120-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-146 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Vacant*
	67 Hope St.	*Johns, E. (Boot repairer)*
	67-69 Hope St.	*Adams, R. F. (Brass foundry)*
	71-75 Hope St.	*Individual Private Residences*
	77 Hope St.	*Conlon, F. (Wood yard)*
	79-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	101-109 Hope St.	**Marbut Pty Ltd (Moulding makers & motor engineers)**
	109 Hope St.	*Monarch Foundry Pty Ltd (Iron founders)*
	111 Hope St.	*O'Brien, J. G.*
	111 Hope St.	*Piper, Miss, E. (Cast maker)*
	113-121 Hope St.	*Individual Private Residences*
	125 Hope St.	*Foster, V. E. (Dairy production)*
	127 Hope St.	*Shutler & Armstrong (Confectioners)*
	- Int. Holloway Rd. –	
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1934 (Cont...)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *68-112 Victoria St.* *114-116 Victoria St.* *118 Victoria St.* *120-124 Victoria St.* *126 Victoria St.* *128 Victoria St.* *132 Victoria St.* *134 Victoria St.* *136 Victoria St.* *138-140 Victoria St.* *140-150 Victoria St.* *152 Victoria St.* *- Int. Alexander St. -* *Victoria St.* *- Brunswick Park &* *Recreation Reserve -* *- Int. Pearson St. –*	 *Individual Private Residences* *Muir, E. (Confectioner)* *Fairy, G. J.* *Mitchell T & Co. Pty Ltd (Sawmills)* *Spicer, H.* *Brunswick Brush Co.* *Gorden, J. A.* *Vacant* *Store room only* *Individual Private Residences* *Private garage* *Mitchell T & Co. Pty Ltd (Nail manufacturers)* *Melbourne Pottery Co. Pty Ltd*
1924	<u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *7 Alexander St.* <u>Cliff St. (North Side)</u> *2 – 26 Cliff St.* *- Int. Gregory St. –* <u>Cliff St. (South Side)</u> *1 – 51 Cliff St.* *Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *126-140 Hope St.* *- Int. Austral Ave. –* *142-152 Hope St.* *- Int. Sutherland St. –* *154 Hope St.* *156-168 Hope St.* *- Int. Hanover St. –* *172-184 Hope St.* *- Int. Fraser St. –*	 *Madigan, S. P.* *Individual Private Residences* *Individual Private Residences* *House being built* *No listing* *Individual Private Residences* *Individual Private Residences* *Lamb, G. (Grocer)* *Individual Private Residences* *Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1924 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	67-79 Hope St.	*Individual Private Residences*
	81a Hope St.	*Gunston, T. (Butcher)*
	81 Hope St.	*Boyd, W. J.*
	81 Hope St.	*Boyd, Mrs. Edith (Greengrocer & confectioner)*
	81b Hope St.	*Wooding, S. (Boot maker)*
	83-103 Hope St.	*Individual Private Residences*
	- Int. Gregory St. –	
	105 Hope St.	*Adams, Mrs. E. (Fruiterer)*
	105 Hope St.	*Jones, L. R. (Boot repairer)*
	105 Hope St.	*Adams, R. F. (Brass foundry)*
	107-163 Hope St.	*Individual Private Residences*
	Hope St.	*Evens Bros. (Builders)*
	Hope St.	**Australasian Marbut Carving Co. Pty Ltd (Moulding makers)**
	Hope St.	**Marbut Engineering Service (Motor engineers)**
	173 Hope St.	*Briggs, Mrs. C. A. (Confectioner)*
	173-183 Hope St.	*Individual Private Residences*
	- Int. Holloway Rd. –	
	- Brunswick Recreation Res. -	
	259-265 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-84 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	5-87 Lyle St.	*Individual Private Residences*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	76-134 Victoria St.	*Individual Private Residences*
	136-138 Victoria St.	*Littlejohn, E. E. (Wood yard & confectioner)*
	140 Victoria St.	*O'Brien, J.*
	142-152 Victoria St.	*Mitchell T & Co. Pty Ltd (Sawmills)*
	152 Victoria St.	*Spicer, H.*
	160 Victoria St.	*Brunswick Brush Co.*
	168 Victoria St.	*Roberts, R. M.*
	170 Victoria St.	*Williams, P.*
	172 Victoria St.	*Stack, S. & Co. (Manufacturing roofing material)*
	174-176 Victoria St.	*Individual Private Residences*
	174-184 Victoria St.	*Victorian Broom Co.*
	Victoria St.	*Motor garage*
	- Int. Alexander St. -	
	Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Int. Pearson St.	

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1914	<u>Alexander St. (East Side)</u>	
	- Int. Victoria St. –	
	Alexander St.	*Beebe, S.*
	Alexander St.	*Kors, Mrs. C.*
	- Int. Hope St. –	
	<u>Alexander St. (West Side)</u>	
	- Int. Victoria St. –	
	7 Alexander St.	*White, W.*
	Alexander St.	*Brick kiln*
	- Int. Hope St. –	
	<u>Cliff St. (North Side)</u>	
	2 – 20 Cliff St.	*Individual Private Residences*
	- Int. Gregory St. –	
	<u>Cliff St. (South Side)</u>	
	21 – 39 Cliff St.	*Individual Private Residences*
	<u>Henkel St.</u>	*No listing*
	<u>Hope St. (North Side)</u>	
	- Int. Ford St. –	
	126-140 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	Hope St.	*Receiving Box (P.O)*
	142-148 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	156-168 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	172-200 Hope St.	*Individual Private Residences*
	Hope St.	*Tucker, H. W.*
	- Int. Fraser St. –	
	<u>Hope St. (South Side)</u>	
	- Int. Gregory St. –	
	105-131 Hope St.	*Individual Private Residences*
	163 Hope St.	*Evens, H. (Builder)*
	Hope St.	*Evens Bros. (Builder)*
	- Int. Alexander St. –	
	- Brunswick Recreation Res. -	
	259-265 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	<u>Lyle St. (North Side)</u>	
	2-81 Lyle St.	*Individual Private Residences*
	<u>Lyle St. (South Side)</u>	
	5-87 Lyle St.	*Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1914 (Cont…)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *76-134 Victoria St.* *136 Victoria St.* *138 Victoria St.* *- Int. Gardener St. -* *Victoria St.* *168 Victoria St.* *172 Victoria St.* *174-176 Victoria St.* *Victoria St.* *Victoria St.* *- Int. Alexander St. -* *Victoria St.* *- Brunswick Park & Recreation Reserve -* *- Int. Pearson St. -*	 *Individual Private Residences* *Littlejohn, E. E. (Confectioner)* *Littlejohn, E. E.* *Spicer, H.* *Littlejohn, J.* *Excelsion Brush Co. – Goodwin, H. (Manager)* *Individual Private Residences* *Victorian Broom Co. – Storey, F. J. (Manager)* *Motor garage* *Melbourne Pottery Co. Pty Ltd – Evans, J. P. (Manager)*
1904	<u>Alexander St. (East Side)</u> *- Int. Victoria St. –* *Alexander St.* *Alexander St.* *Alexander St.* *Alexander St.* *- Int. Hope St. –* <u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *Alexander St.* *Alexander St.* *- Int. Hope St. –* <u>Cliff St. (North Side)</u> *- Int. Gregory St. –* *- Right-of-way. –* *2 – 10 Cliff St.* *- Int. Percy St. –* <u>Cliff St. (South Side)</u> *- Int. Percy St. –* *- Right-of-way. –* *- Int. Gregory St. –* *- Right-of-way. –* *117 Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *- Int. Sutherland St. –* *156-168 Hope St.* *- Int. Hanover St. –* *Hope St.* *- Int. Fraser St. –*	 *Brick yard* *Healey, J.* *Kieley, M.* *Doyle, J.* *Scott, J.* *Brick kiln* *Individual Private Residences* *Loves, Mrs. Regina* *No listing* *Boyle, W. H. “Norma”*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1904 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	105-129 Hope St.	*Individual Private Residences*
	163 Hope St.	*Evens, P.*
	Hope St.	*Evens Bros. (Builders & contractors)*
	- Int. Alexander St. –	
	- Int. Wilson St. –	
	Hope St.	*Wilson, J. R.*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-82 Lyle St.	*Individual Private Residences*
	Lyle St.	*Paddock*
	Lyle St. (South Side)	
	7-57 Lyle St.	*Individual Private Residences*
	Lyle St.	*Standard Pottery – Hancock & Ramage*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	82-134 Victoria St.	*Individual Private Residences*
	- Int. Gardener St. -	
	168 Victoria St.	*Littlejohn, J. (Broom manufacturer)*
	- Int. Alexander St. -	
	- Int. Wilson St. -	
	- Int. Pearson St. –	

Notes: Text shown in italics relate to neighbouring properties

APPENDIX D

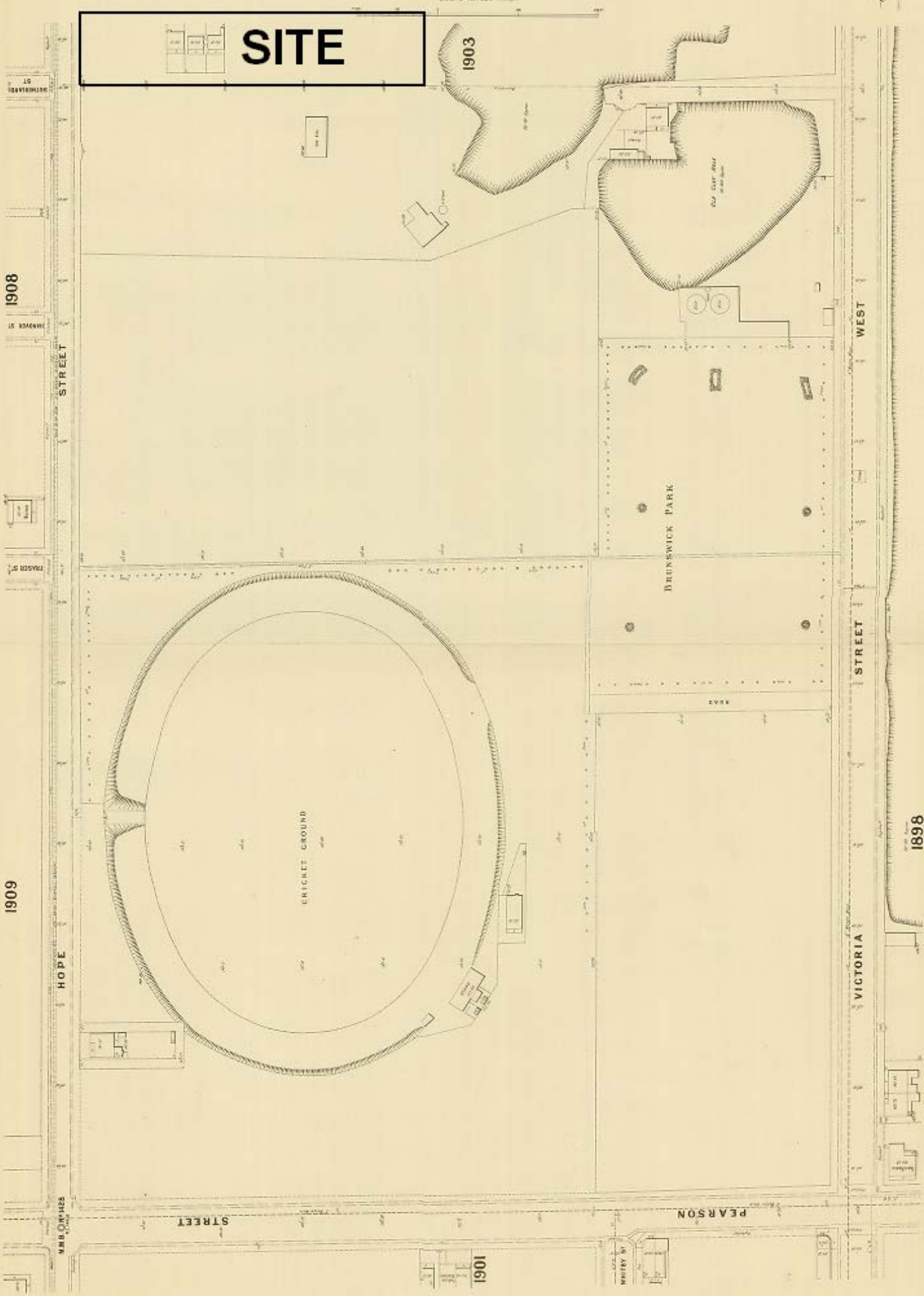
MMBW PLANS

MELBOURNE AND METROPOLITAN BOARD OF WORKS.

CITY OF BRUNSWICK

DETAIL PLAN No. 1902

Scale 40 Feet = 1 Inch

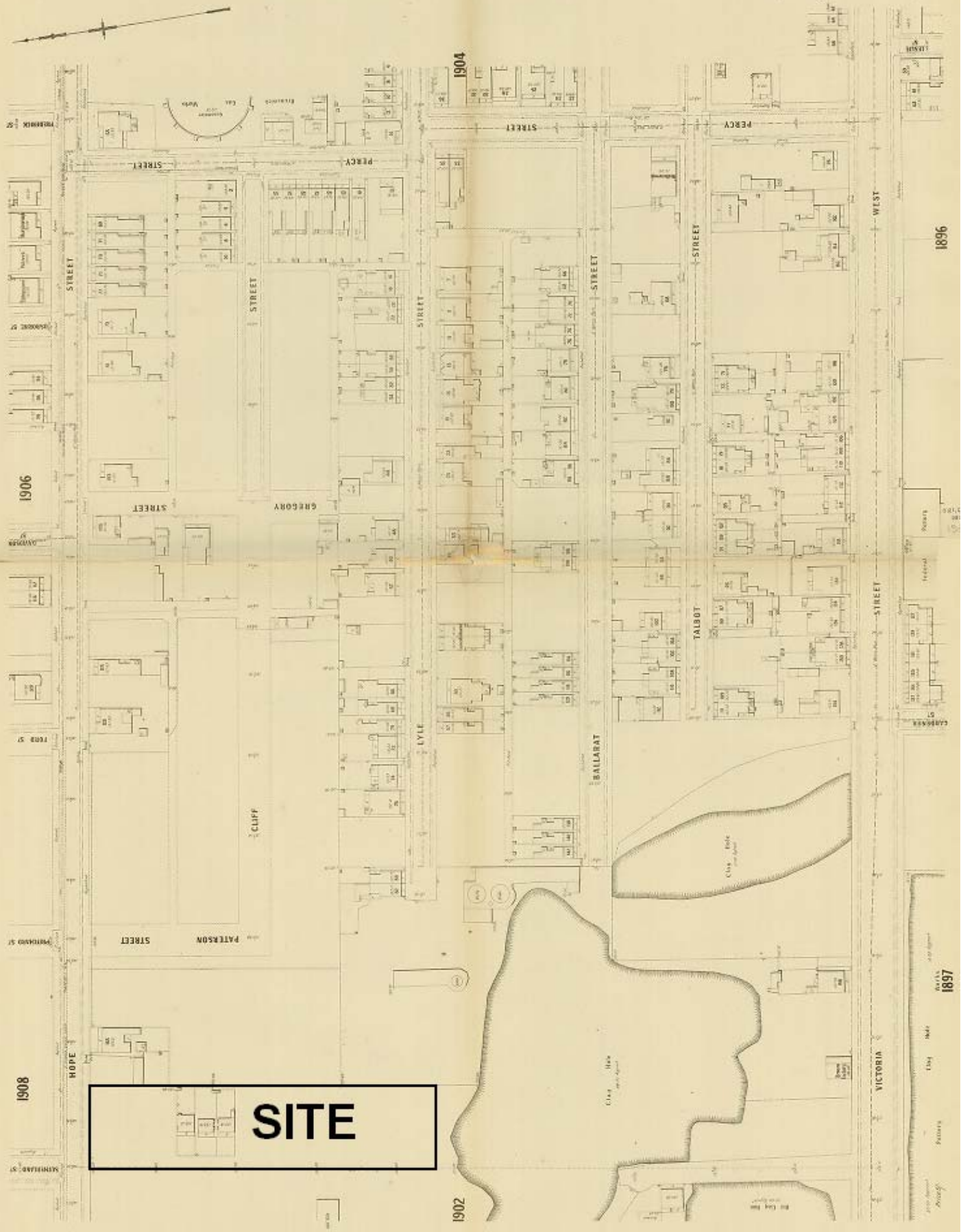


MELBOURNE AND METROPOLITAN BOARD OF WORKS.

TOWN OF BRUNSWICK

DETAIL PLAN No. 1903

Scale 40 Feet = 1 Inch



APPENDIX E

AERIAL PHOTOGRAPHS – 1951 & 2005

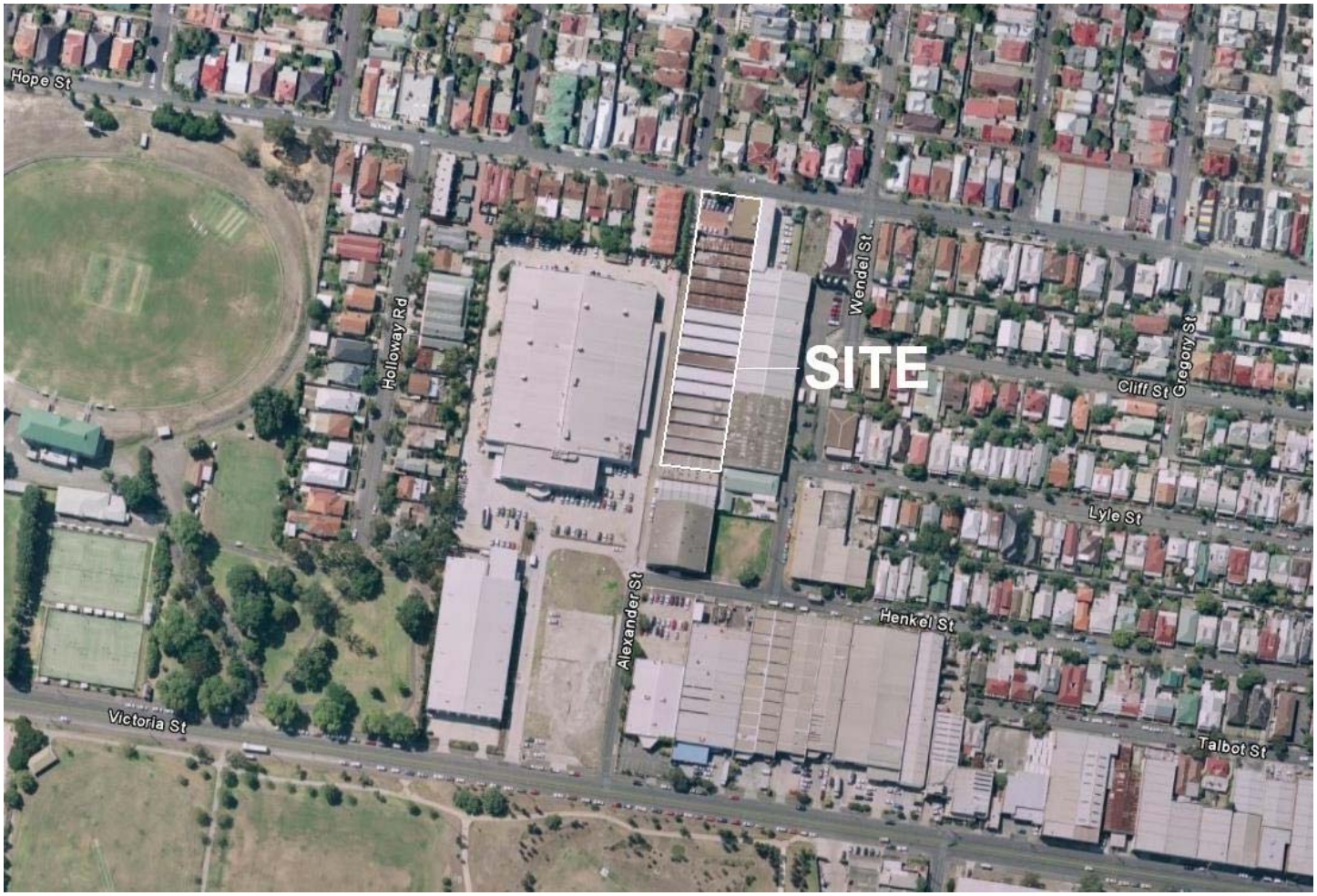
DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 High Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** April, 2009

AERIAL PHOTOGRAPH - 1951

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 High Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** April, 2009

AERIAL PHOTOGRAPH – 1951 (ZOOM-IN)

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA68 ---------- **DATE:** April, 2009



AERIAL PHOTOGRAPH - 2005

APPENDIX F

GROUNDWATER DATABASE SEARCH

DNRE Groundwater Database Search - Location (Melb_loc) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE ID	OLD BORE NO.	RIG NO./ LIC NO.	BORE AUTH	AMG SHEET	AMG ZONE	EAST	NORTH	DATE COMPLETED	TOTAL DEPTH (m)	RLNS	BORE TYPE	USES	DRILL METHOD	LOGS G D	AQUIF FROM (m)	AQUIF TO (m)	TSS mg/L	Difference East (m)	Difference North (m)	Radius (km)
310707	468	NONE	SEC	782221	55	318799	5818221	12/03/1974	5.49		NK	SE		N N				-1047	-234	1.07
310708	471	NONE	SEC	782221	55	318799	5818221	12/03/1974	6.1		NK	SE		N N				-1047	-234	1.07
310709	472	NONE	SEC	782221	55	318799	5818221	12/03/1974	2.44		NK	SE		N N				-1047	-234	1.07
310710	475	NONE	SEC	782221	55	318799	5818221	12/03/1974	3.05		NK	SE		N N				-1047	-234	1.07
310711	479	NONE	SEC	782221	55	318799	5818221	12/03/1974	5.64		NK	SE		N N				-1047	-234	1.07
68324	10002	20668	LAND	782221	55	318373	5818393	6/02/1983	3.9		GW	DM		N N				-1473	-62	1.47
140044	*****	54035	NKN	782222	55	319383	5816903	11/01/2000	9		GW	IV	NKN	N Y				-463	-1552	1.62
140043	*****	54035	NKN	782222	55	319382	5816902	20/10/1999	10		GW	IV	NKN	N Y				-464	-1553	1.62
140042	*****	54035	NKN	782222	55	319381	5816901	21/10/1999	10		GW	IV	NKN	N Y				-465	-1554	1.62
140041	*****	54035	NKN	782222	55	319380	5816900	20/08/1999	10		GW	IV	NKN	N Y				-466	-1555	1.62
122008	*****	42062	NKN	782221	55	321809	5818489	16/04/1994	16		GW	IV	ROA	N Y				1963	34	1.96

DNRE Groundwater Database Search - Composition (Melb_com) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE Id	ParNo	DITR No	Date Completed	Aquif From (m)	Aquif To (m)	Lith	SWL (m)	Pump Rate (l/sec)	Time (h:m)	Draw-down (m)	Latest Chemical Analysis Date Sampled	SWL Sample	MTH	TSS	CL	FE Total	PH	EC	Hard
68324	32796	10002	6/02/1983	3	3.5	BASA	3	3.3		3.5		0		0	0	0	0	0	0
122008	32796		16/04/1994	14.2	0		0		2:00	0		0		0	0	0	0	0	0
140041	32796		20/08/1999	7	0		0		0:15	0		0		0	0	0	0	0	0
140042	32796		21/10/1999	7	0		0		0:15	0		0		0	0	0	0	0	0
140043	32796		20/10/1999	7.5	0		0		0:15	0		0		0	0	0	0	0	0
140044	32796		11/01/2000	7	0		0		0:15	0		0		0	0	0	0	0	0
310707	32796	468	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310708	32796	471	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310709	32796	472	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310710	32796	475	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310711	32796	479	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0

DNRE Groundwater Database Search - Aquifer (Melb_aq) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE ID	OLD BORE NO.	WATER SCREEN	FROM (m)	TO (m)	LITHO LOGY	CASING DEPTH (m)	DIA (mm)	TYP	APER (mm)	SWL (m)	PUMP DEPTH (m)	PUMP RATE (l/sec)	PUMP TIME (H:M)	DRAW DOWN (m)	REC TIME (H:M)	EC	TEST TYPE	TEST DATE
68324	10002	WATER	3	3.5	BASA			NKN		3	3.5	3.33		3.5			PUM	6/02/1983
		SCREEN	3	3.5	NOT			NKN		3		3.33		3.5			PUM	6/02/1983
122008	*****	SCREEN	13	16			50	PSL					2:00					16/04/1994
		WATER	14.2			13	50	P09										16/04/1994
140041	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	20/08/1999
		WATER	7			7	50	P18										20/08/1999
140042	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	21/10/1999
		WATER	7			7	50	P18										21/10/1999
140043	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	20/10/1999
		WATER	7.5			7	50	P18										20/10/1999
140044	*****	SCREEN	6	9			50	PSL	1			0.1	0:15				PUM	11/01/2000
		WATER	7			6	50	P18										11/01/2000

APPENDIX G

BOREHOLE LOGS

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **28-Apr-09** **Method: Hand Auger** **Borehole No.: BH 1**

BOREHOLE LOG

Description		Depth (metres)	Sample or Test	Description/Rank
	Garden bed on surface	0.00		
Fill	- Light grey to brown - Silty clay - Contains tree roots - No odour	0.10 0.20	●	BH 1, 0 - 0.15 m Contamination Ranking = 0 P.I.D. = 6.2 ppm
		0.30		
		0.40		
	Layer of crushed rock/concrete pieces			
Fill	- Light grey to brown - Silty clay - Contains concrete pieces - No odour	0.50 0.60	●	BH 1, 0.6 m Contamination Ranking = 0 P.I.D. = 5.4 ppm
	Refusal on rock	0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **28-Apr-09** **Method: Hand Auger** **Borehole No.: BH 2**

BOREHOLE LOG

Description	Depth (metres)		Sample or Test	Description/Rank
Garden bed on surface	0.00			
Fill - Light grey to brown				
- Silty clay (loose fill)	0.10		●	BH 2, 0 - 0.15 m
- No odour				Contamination Ranking = 0
	0.20			P.I.D. = 4.9 ppm
	0.30			
	0.40			
	0.50			
- Same as above				
- Contained small piece of cement sheeting	0.60		●	BH 2, 0.6 m
- No odour				Contamination Ranking = 0
Refusal on rock	0.70			P.I.D. = 4.4 ppm
	0.80			
	0.90			
	1.00			
	1.10			
	1.20			
	1.30			
	1.40			
	1.50			
	1.60			
	1.70			
	1.80			
	1.90			
	2.00			
	2.10			
	2.20			
	2.30			

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **28-Apr-09** **Method: Hand Auger** **Borehole No.: BH 3**

BOREHOLE LOG

Description		Depth (metres)	Sample or Test	Description/Rank
	Garden bed on surface	0.00		
Fill	- Light grey to brown - Silty clay (loose fill) - No odour	0.10	●	BH 3, 0 - 0.15 m Contamination Ranking = 0 P.I.D. = 6.2 ppm
		0.20		
Natural	- Light brown - Basaltic clay - No odour	0.30		
		0.40	●	BH 3, 0.4 m Contamination Ranking = 0 P.I.D. = 2.9 ppm
		0.50		
	End of borehole	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

APPENDIX H

P.I.D. CALIBRATION CERTIFICATE

D&A

DIOMIDES &
ASSOCIATES PTY LTD

ACN 056 657 848
ABN 99 562 502 680

Environmental Consultants
11 Conway Avenue, Donvale VIC 3111
Phone: (03) 9842 2000 Fax: (03) 9842 0322
Web: www.diomides.com.au

CALIBRATION CERTIFICATE FOR PHOTO IONISATION DETECTOR

MAKE: PHOTOVAC

MODEL: 2020PRO

Calibration gas species: **Iso-butylene**;

Calibration gas concentration: **97 ppm**, balance zero air;

Lamp: **10.6 eV**.

This PID has been referenced to **Iso-butylene** so that the concentration is displayed as **97 ppm**, with a default response factor of **1**.
All PID's are initially zero calibrated.

The above detector was calibrated in accordance with manufacturer's specifications. Cylinder certificate is available upon request.

Date: 27/04/2009

APPENDIX I

SUMMARY SOIL LABORATORY RESULTS

SUMMARY SOIL LABORATORY RESULTS
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria							MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0-0.15M	BH1 0.6M	BH2 0-0.15M	BH2 0.6M	BH3 0-0.15M	BH3 0.4M
BRUNSWICK DA 1468		EIL	HIL A	HIL D	Fill	Cat C	Cat B	EPA	M09-Ap08776	M09-Ap08777	M09-Ap08778	M09-Ap08779	M09-Ap08780	M09-Ap08781
Analyte	Unit								Fill	Fill	Fill	Fill	Fill	Natural
Asbestos												Chrysotile		
Antimony	mg/kg	20[A]							< 10	< 10	< 10	< 10	< 10	< 10
Arsenic	mg/kg	20	100	400	20	500	2000		4.8	6.4	< 2	5.5	6.4	< 2
Beryllium	mg/kg		20	80					< 2	< 2	< 2	< 2	< 2	< 2
Cadmium	mg/kg	3	20	80	3	100	400		< 0.5	< 0.5	< 0.5	0.7	< 0.5	< 0.5
Chromium	mg/kg	50[A]							14	19	22	25	16	22
Chromium (III)	mg/kg	400	120000	480000										
Chromium (VI)	mg/kg	1	100	400	1	500	2000							
Cobalt	mg/kg		100	400					< 5	6.6	8.3	10	< 5	5.9
Copper	mg/kg	100	1000	4000	100	5000	20000		17	39	5.3	56	18	< 5
Lead	mg/kg	600	300	1200	300	1500	6000		23	100	15	67	54	16
Mercury	mg/kg	1	15	60	1	75	300		< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Molybdenum	mg/kg				40	1000	4000		< 10	< 10	< 10	< 10	< 10	< 10
Nickel	mg/kg	60	600	2400	60	3000	12000		13	21	12	22	9.1	8.4
Selenium	mg/kg				10	50	200		< 2	< 2	< 2	< 2	< 2	< 2
Silver	mg/kg				10	180	720		< 5	< 5	< 5	< 5	< 5	< 5
Tin	mg/kg	50[A]			50	500			< 10	< 10	< 10	< 10	< 10	< 10
Zinc	mg/kg	200	7000	28000	200	35000	140000		53	120	12	230	97	16
Benzene	mg/kg				1	4	16	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Ethylbenzene	mg/kg							50	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	mg/kg							130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Xylenes(ortho.meta and para)	mg/kg							25	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total BETX	mg/kg				7	70	240		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4.4'-DDD	mg/kg								< 0.05		< 0.05		< 0.05	
4.4'-DDE	mg/kg		200	800		50	50		< 0.05		< 0.05		< 0.05	
4.4'-DDT	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	
b-BHC	mg/kg								< 0.05		< 0.05		< 0.05	
Chlordane	mg/kg		50	200		4	16		< 0.1		< 0.1		< 0.1	
d-BHC	mg/kg								< 0.05		< 0.05		< 0.05	
Dieldrin	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		10	40		1.2	4.8		< 0.05		< 0.05		< 0.05	
Heptachlor epoxide	mg/kg								< 0.05		< 0.05		< 0.05	
Hexachlorobenzene	mg/kg								< 0.05		< 0.05		< 0.05	
Methoxychlor	mg/kg								< 0.05		< 0.05		< 0.05	
Toxophene	mg/kg								< 0.1		< 0.1		< 0.1	
Aldrin + Dieldrin	mg/kg		10	40		1.2	4.8		< 0.1		< 0.1		< 0.1	
Organochlorine Pesticides[3]	mg/kg				1									
Other organochlorine pesticides[4]	mg/kg					10	50							
Aroclor-1016	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1221	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1232	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1242	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1248	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1254	mg/kg								< 0.1		< 0.1		< 0.1	
Aroclor-1260	mg/kg								< 0.1		< 0.1		< 0.1	
Total PCB	mg/kg		10	40	2				< 1		< 1		< 1	
Acenaphthene	mg/kg								< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg								< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg								< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1
Benz(a)anthracene	mg/kg								< 0.1	0.6	< 0.1	0.1	0.2	< 0.1
Benzo(a)pyrene	mg/kg		1	4	1	5	20		< 0.1	0.6	< 0.1	< 0.1	0.2	< 0.1
Benzo(b)fluoranthene	mg/kg								< 0.1	0.6	< 0.1	0.1	0.1	< 0.1
Benzo(g.h.i)perylene	mg/kg								< 0.1	0.5	< 0.1	< 0.1	0.2	< 0.1
Benzo(k)fluoranthene	mg/kg								< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg								< 0.1	0.6	< 0.1	< 0.1	0.1	< 0.1
Dibenz(a.h)anthracene	mg/kg								< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg								< 0.1	1.2	< 0.1	0.2	0.3	< 0.1
Fluorene	mg/kg								< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1.2.3-cd)pyrene	mg/kg								< 0.1	0.4	< 0.1	< 0.1	0.1	< 0.1
Naphthalene	mg/kg								< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg								< 0.1	0.8	< 0.1	< 0.1	0.1	< 0.1
Pyrene	mg/kg								0.1	1.3	< 0.1	0.2	0.3	< 0.1
Total PAH	mg/kg		20	80	20	100	400		0.1	7.1	< 0.1	0.6	1.6	< 0.1
TRH C6-C9 Fraction by GC	mg/kg				100	650	2600	65	< 20	< 20	< 20	< 20	< 20	< 20
TRH C10-C14 Fraction by GC	mg/kg								< 50	< 50	< 50	< 50	< 50	< 50
TRH C15-C28 Fraction by GC	mg/kg								< 100	< 100	< 100	< 100	< 100	< 100
TRH C29-C36 Fraction by GC	mg/kg								< 100	< 100	< 100	< 100	< 100	< 100
TRH > C9	mg/kg				1000	10000	40000	1000	< 250	< 250	< 250	< 250	< 250	< 250

NOTES:

EIL refers to Ecological Investigation Level as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL A refers to the Health Investigation Level "A" which applies for Standard residential with garden/accessible soil, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL D refers to the Health Investigation Level "D" which applies for residential with minimal opportunities for soil access: includes dwellings with fully and permanently paved yard space such as high-rise apartments and flats, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL E refers to the Health Investigation Level "E" which applies for parks, recreational open space and playing fields: includes secondary schools, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL F refers to the Health Investigation Level "F" which applies for Commercial/Industrial: includes premises such as shops and offices as well as factories and industrial sites, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

EPA NSW refers to the threshold concentrations for sensitive land use - soils (Table 3), as referred to the NSW EPA Guidelines for Assessing Service Station Sites, 1994.

FILL refers to fill material from EPA Information Bulletin, Publication 448.3 titled "Classification of Wastes", and specifically Table 2 titled, "Maximum Contaminant Concentrations Allowed in Soil to be Disposed of as Fill material."

CAT C refers to Category C contaminated soil from EPA Information Bulletin, Publication 448.3 titled "Classification of Wastes", and specifically Table 3 titled, "Maximum Contaminant Concentrations and Leachable Concentrations Allowed in Soil to be Disposed of as Category C (Contaminated Soil)."

CAT B refers to Category B contaminated soil from EPA Information Bulletin, Publication 448.3 titled "Classification of Wastes", and specifically Table 4 titled, "Maximum Contaminant Concentrations and Leachable Concentrations Allowed in Soil to be Disposed of as Category B (Contaminated Soil)."

1 - Total sum of carbon tetrachoride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-diclorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene, dichloromethane (methylene chloride), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride and hexachlorobutadiene.

2 - Total sum of carbon tetrachoride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-diclorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene, dichloromethane (methylene chloride), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and trichloroethene.

3 - Total sum of aldrin, hexachlorobenzene, alpha BHC, beta BHC, gamma BHC (lindane), delta BHC, chlordane, DDT, DDD, DDE, dieldrin, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor and endosulfan (includes endosulfan I, endosulfan II and endosulfan sulphate).

4 - Total sum of hexachlorobenzene (HCB), alpha BHC, beta BHC, gamma BHC (lindane), delta BHC, chlordane, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor, and endosulfan (includes endosulfan I, endisulfan II and endosulfan sulphate).

5 - Total sum of 4-chloro-3-methylphenol, 2-chlorophenol, 2,4-dichlorophenol, 2,6-dichlorophenol, pentachlorophenol, 2,3,4,5-tetrachlorophenol, 2,3,4,6-tetrachlorophenol, 2,3,5,6-tetrachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.

6 - Total sum of phenol, 2-methylphenol (o-cresol), 3-methylphenol (m-cresol), 4-methylphenol (p-cresol), 2,4-dimethylphenol, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol, 2-nitrophenol, 4-nitrophenol, 2-cyclohexyl-4,6-dinitrophenol, and dinoseb.

A - The value obtained for Antimony, Chromium and Tin have been taken from Table 2 Environmental Soil Quality Guidelines from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, ANZECC/NHMRC, January 1992.

Mod. refers to guideline values that are modified values based on two/three part composites. These are calculated by dividing the guideline value by the number of samples used in the composite (i.e. two or three).

ND indicates Not Detected

Shaded cells indicate that the concentration is above one or more of the adopted criteria.

n/a indicates Not Applicable for RPD calculation since both concentrations are below their respective (different) method detection limits

*** (asterisk) indicates that half the method detection limit has been used in the RPD calculation**

All RPDs have been calculated in accordance with Australian Standards AS 4482.1 – 1997: Guide to the sampling and investigation of potentially contaminated soil.

APPENDIX J

LABORATORY REPORTS FOR

SOIL SAMPLES

mgt Environmental Consulting Pty. Ltd.
3 Kingston Town Close, Oakleigh, Victoria 3166, Australia
Postal address: P. O. Box 276, Oakleigh, Victoria 3166, Australia
Telephone: (03) 9564 7055
Fax: (03) 9564 7190
Email: mgt@mgtenv.com.au

CERTIFICATE OF ANALYSIS

Diomides & Associates Pty. Ltd.
11 Conway Ave
Donvale
Victoria 3111
Site: BRUNSWICK DA 1468

Report Number: 244519-V1 Page 1 of 13
Order Number:
Date Received: Apr 28, 2009
Date Sampled: Apr 28, 2009
Date Reported: May 6, 2009
Contact: Costa Diomides

Methods

- USEPA 8082 Polychlorinated Biphenyls
- USEPA 8081A Organochlorine Pesticides
- USEPA 8270C Polycyclic Aromatic Hydrocarbons
- USEPA 8260B - MGT 350A Monocyclic Aromatic Hydrocarbons
- TRH C6-C36 - MGT 100A
- USEPA 6010B Heavy Metals & USEPA 7470/71 Mercury
- Method 102 - ANZECC - % Moisture

Comments

Notes

Authorised

Report Number: 244519-V1

Michael Wright
Laboratory Manager
NATA Signatory

Rhonda Chouman
Client Manager
NATA Signatory

Orlando Scalzo
Chief Organic Chemist
NATA Signatory

Tammy Lakeland
Chief Inorganic Chemist

NATA
WORLD RECOGNISED ACCREDITATION

NATA Accredited
Laboratory Number 1261
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Environmental Laboratory Industry Group
Member

Environmental Consulting Pty. Ltd.

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Telephone: (03) 9564 7055
Fax: (03) 9564 7190
Email: mgt@mgtenv.com.au

GLOSSARY OF TERMS

UNITS

mg/kg	milligrams per Kilogram	**mg/l**	milligrams per litre
ug/l	micrograms per litre	**ppm**	Parts per million
ppb	Parts per billion	**%**	Percentage
org/100ml	Organisms per 100 millilitres	**NTU**	Units

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice

QC - ACCEPTANCE CRITERIA

RPD Duplicates	Results <10 times the LOR : No Limit Results between 10-20 times LOR : RPD must lie between 0-50% Results >20 times LOR : RPD must lie between 0-20%
LCS Recoveries	Recoveries must lie between 70-130% - Phenols 40-150%
CRM Recoveries	Recoveries must lie between 70-130% - Phenols 40-150%
Method Blanks	Not to exceed LOR
SPIKE Recoveries	Recoveries must lie between 70-130% - Phenols 40-150%

GENERAL COMMENTS

1. All results in this report supersede any previously corresponded results.
2. All soil results are reported on a dry basis.
3. Samples are analysed on an as received basis.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR this is due to either Matrix Interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Orgaonchlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
7. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
8. For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
9. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two two sets of data below the LOR with a positive RPD - eg: LOR 0.1, Result A = <0.1 (raw data is 0.02) & Result B = <0.1 (raw data is 0.03) resulting in a RPD of 40% calculated from the raw data.

REPORT SPECIFIC NOTES

COMMENTS:

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH1 0-0.15M**	**BH1 0.6M**	**BH2 0-0.15M**	**BH2 0.6M**
11 Conway Ave	**Lab Number**		**M09-Ap08776**	**M09-Ap08777**	**M09-Ap08778**	**M09-Ap08779**
Donvale	**Matrix**		**Soil**	**Soil**	**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**				
Total Recoverable Hydrocarbons						
TRH C6-C9 Fraction by GC	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14 Fraction by GC	50	mg/kg	< 50	< 50	< 50	< 50
TRH C15-C28 Fraction by GC	100	mg/kg	< 100	< 100	< 100	< 100
TRH C29-C36 Fraction by GC	100	mg/kg	< 100	< 100	< 100	< 100
Monocyclic Aromatic Hydrocarbons						
Benzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Xylenes(ortho.meta and para)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Fluorobenzene (surr.)	1	%	57	69	71	84
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	0.1	mg/kg	< 0.1	0.2	< 0.1	< 0.1
Benz(a)anthracene	0.1	mg/kg	< 0.1	0.6	< 0.1	0.1
Benzo(a)pyrene	0.1	mg/kg	< 0.1	0.6	< 0.1	< 0.1
Benzo(b)fluoranthene	0.1	mg/kg	< 0.1	0.6	< 0.1	0.1
Benzo(g.h.i)perylene	0.1	mg/kg	< 0.1	0.5	< 0.1	< 0.1
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	0.2	< 0.1	< 0.1
Chrysene	0.1	mg/kg	< 0.1	0.6	< 0.1	< 0.1
Dibenz(a.h)anthracene	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1
Fluoranthene	0.1	mg/kg	< 0.1	1.2	< 0.1	0.2
Fluorene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1.2.3-cd)pyrene	0.1	mg/kg	< 0.1	0.4	< 0.1	< 0.1
Naphthalene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	0.1	mg/kg	< 0.1	0.8	< 0.1	< 0.1
Pyrene	0.1	mg/kg	0.1	1.3	< 0.1	0.2
Total PAH	0.1	mg/kg	0.1	7.1	< 0.1	0.6
Terphenyl-d14 (surr.)	1	%	99	102	100	93
2-Fluorobiphenyl (surr.)	1	%	115	117	117	108

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH1 0-0.15M**	**BH1 0.6M**	**BH2 0-0.15M**	**BH2 0.6M**
11 Conway Ave	**Lab Number**		**M09-Ap08776**	**M09-Ap08777**	**M09-Ap08778**	**M09-Ap08779**
Donvale	**Matrix**		**Soil**	**Soil**	**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**				
Organochlorine Pesticides						
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlordane	0.1	mg/kg	< 0.1	-	< 0.1	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxophene	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	77	-	104	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	149	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH1 0-0.15M**	**BH1 0.6M**	**BH2 0-0.15M**	**BH2 0.6M**
11 Conway Ave	**Lab Number**		**M09-Ap08776**	**M09-Ap08777**	**M09-Ap08778**	**M09-Ap08779**
Donvale	**Matrix**		**Soil**	**Soil**	**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**				
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	77	-	104	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	149	-
% Moisture	0.1	%	5.1	11	19	13
Heavy Metals						
Antimony	10	mg/kg	< 10	< 10	< 10	< 10
Arsenic	2.0	mg/kg	4.8	6.4	< 2	5.5
Beryllium	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.7
Chromium	5	mg/kg	14	19	22	25
Cobalt	5	mg/kg	< 5	6.6	8.3	10
Copper	5	mg/kg	17	39	5.3	56
Lead	5	mg/kg	23	100	15	67
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	< 10	< 10	< 10
Nickel	5	mg/kg	13	21	12	22
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	5	mg/kg	< 5	< 5	< 5	< 5
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	53	120	12	230

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH3 0-0.15M**	**BH3 0.4M**
11 Conway Ave	**Lab Number**		**M09-Ap08780**	**M09-Ap08781**
Donvale	**Matrix**		**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**		
Total Recoverable Hydrocarbons				
TRH C6-C9 Fraction by GC	20	mg/kg	< 20	< 20
TRH C10-C14 Fraction by GC	50	mg/kg	< 50	< 50
TRH C15-C28 Fraction by GC	100	mg/kg	< 100	< 100
TRH C29-C36 Fraction by GC	100	mg/kg	< 100	< 100
Monocyclic Aromatic Hydrocarbons				
Benzene	0.05	mg/kg	< 0.05	< 0.05
Toluene	0.05	mg/kg	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	< 0.05	< 0.05
Xylenes(ortho.meta and para)	0.05	mg/kg	< 0.05	< 0.05
Fluorobenzene (surr.)	1	%	84	61
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.1	mg/kg	< 0.1	< 0.1
Acenaphthylene	0.1	mg/kg	< 0.1	< 0.1
Anthracene	0.1	mg/kg	< 0.1	< 0.1
Benz(a)anthracene	0.1	mg/kg	0.2	< 0.1
Benzo(a)pyrene	0.1	mg/kg	0.2	< 0.1
Benzo(b)fluoranthene	0.1	mg/kg	0.1	< 0.1
Benzo(g.h.i)perylene	0.1	mg/kg	0.2	< 0.1
Benzo(k)fluoranthene	0.1	mg/kg	< 0.1	< 0.1
Chrysene	0.1	mg/kg	0.1	< 0.1
Dibenz(a.h)anthracene	0.1	mg/kg	< 0.1	< 0.1
Fluoranthene	0.1	mg/kg	0.3	< 0.1
Fluorene	0.1	mg/kg	< 0.1	< 0.1
Indeno(1.2.3-cd)pyrene	0.1	mg/kg	0.1	< 0.1
Naphthalene	0.1	mg/kg	< 0.1	< 0.1
Phenanthrene	0.1	mg/kg	0.1	< 0.1
Pyrene	0.1	mg/kg	0.3	< 0.1
Total PAH	0.1	mg/kg	1.6	< 0.1
Terphenyl-d14 (surr.)	1	%	105	113
2-Fluorobiphenyl (surr.)	1	%	122	127

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH3 0-0.15M**	**BH3 0.4M**
11 Conway Ave	**Lab Number**		**M09-Ap08780**	**M09-Ap08781**
Donvale	**Matrix**		**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**		
Organochlorine Pesticides				
4.4'-DDD	0.05	mg/kg	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-
Chlordane	0.1	mg/kg	< 0.1	-
d-BHC	0.05	mg/kg	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-
Toxophene	0.1	mg/kg	< 0.1	-
Dibutylchlorendate (surr.)	1	%	109	-
Tetrachloro-m-xylene (surr.)	1	%	138	-
Polychlorinated Biphenyls				
Aroclor-1016	0.1	mg/kg	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-

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Diomides & Associates Pty. Ltd.	**Client Sample ID**		**BH3 0-0.15M**	**BH3 0.4M**
11 Conway Ave	**Lab Number**		**M09-Ap08780**	**M09-Ap08781**
Donvale	**Matrix**		**Soil**	**Soil**
Victoria 3111	**Sample Date**		**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**LOR**	**Units**		
Aroclor-1248	0.1	mg/kg	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-
Total PCB	1	mg/kg	< 1	-
Dibutylchlorendate (surr.)	1	%	109	-
Tetrachloro-m-xylene (surr.)	1	%	138	-
% Moisture	0.1	%	7.5	15
Heavy Metals				
Antimony	10	mg/kg	< 10	< 10
Arsenic	2.0	mg/kg	6.4	< 2
Beryllium	2	mg/kg	< 2	< 2
Cadmium	0.5	mg/kg	< 0.5	< 0.5
Chromium	5	mg/kg	16	22
Cobalt	5	mg/kg	< 5	5.9
Copper	5	mg/kg	18	< 5
Lead	5	mg/kg	54	16
Mercury	0.1	mg/kg	0.1	< 0.1
Molybdenum	10	mg/kg	< 10	< 10
Nickel	5	mg/kg	9.1	8.4
Selenium	2	mg/kg	< 2	< 2
Silver	5	mg/kg	< 5	< 5
Tin	10	mg/kg	< 10	< 10
Zinc	5	mg/kg	97	16

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Diomides & Associates Pty. Ltd.	Client Sample ID	BH1 0-0.15M	BH1 0-0.15M	RPD	SPIKE	LCS	Method blank
11 Conway Ave	Lab Number	09-Ap08776	09-Ap08776	09-Ap08776	09-Ap08776	Batch	Batch
Donvale	QA Description		Duplicate	Duplicate % RPD	Spike % Recovery	% Recovery	
Victoria 3111	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009
Analysis Type	**Units**			% RPD	% Recovery	% Recovery	mg/L
Organochlorine Pesticides		Batch	Batch	Batch	Batch		
4.4'-DDD		-	-	< 1	128	116	< 0.05
4.4'-DDE		-	-	< 1	108	107	< 0.05
4.4'-DDT		-	-	< 1	98	90	< 0.05
a-BHC		-	-	< 1	118	83	< 0.05
Aldrin		-	-	< 1	115	101	< 0.05
b-BHC		-	-	< 1	105	101	< 0.05
Chlordane		-	-	< 1	71	-	< 0.1
d-BHC		-	-	< 1	117	89	< 0.05
Dieldrin		-	-	< 1	118	111	< 0.05
Endosulfan I		-	-	< 1	108	108	< 0.05
Endosulfan II		-	-	< 1	121	114	< 0.05
Endosulfan sulphate		-	-	< 1	112	109	< 0.05
Endrin		-	-	< 1	122	90	< 0.05
Endrin aldehyde		-	-	< 1	113	106	< 0.05
Endrin ketone		-	-	< 1	103	97	< 0.05
g-BHC (Lindane)		-	-	< 1	125	85	< 0.05
Heptachlor		-	-	< 1	116	91	< 0.05
Heptachlor epoxide		-	-	< 1	110	111	< 0.05
Hexachlorobenzene		-	-	< 1	128	82	< 0.05
Methoxychlor		-	-	< 1	95	95	< 0.05
Toxophene		-	-	< 1	-	-	< 0.1
Polychlorinated Biphenyls		Batch	Batch	Batch	Batch		
Aroclor-1016		-	-	< 1	-	-	< 0.1
Aroclor-1221		-	-	< 1	-	-	< 0.1
Aroclor-1232		-	-	< 1	-	-	< 0.1
Aroclor-1242		-	-	< 1	-	-	< 0.1
Aroclor-1248		-	-	< 1	-	-	< 0.1
Aroclor-1254		-	-	< 1	-	-	< 0.1

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Diomides & Associates Pty. Ltd.
11 Conway Ave
Donvale

Victoria 3111

	Client Sample	**BH1 0-0.15M**	**BH1 0-0.15M**	**RPD**	**SPIKE**	**LCS**	**Method blank**
	Lab Number	**09-Ap08776**	**09-Ap08776**	**09-Ap08776**	**09-Ap08776**	**Batch**	**Batch**
	QA Description		**Duplicate**	**Duplicate % RPD**	**Spike % Recovery**	**% Recovery**	
	Matrix	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**
	Sample Date	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**	**Apr 28, 2009**
Analysis Type	**Units**			% RPD	% Recovery	% Recovery	mg/L
Polychlorinated Biphenyls		Batch	Batch	Batch	Batch		
Aroclor-1260		-	-	< 1	105	106	< 0.1
Total PCB		-	-	< 1	105	106	< 1
Heavy Metals		Batch	Batch	Batch	Batch		
Antimony		-	-	8.2	80	91	< 10
Arsenic		-	-	< 1	80	96	< 2
Beryllium		-	-	8.8	86	91	< 2
Cadmium		-	-	< 1	91	95	< 0.5
Chromium		-	-	20	89	96	< 5
Cobalt		-	-	-	81	95	< 5
Copper		-	-	13	101	91	< 5
Lead		-	-	14	95	94	< 5
Molybdenum		-	-	< 1	87	96	< 10
Nickel		-	-	20	80	95	< 5
Selenium		-	-	< 1	-	95	< 2
Silver		-	-	< 1	-	-	< 5
Tin		-	-	< 1	84	99	< 10
Zinc		-	-	12	84	101	< 5

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Diomides & Associates Pty. Ltd.	Client Sample ID	BH1 0.6M	BH1 0.6M	RPD	SPIKE	LCS	Method blank
11 Conway Ave	Lab Number	09-Ap08777	09-Ap08777	09-Ap08777	09-Ap08777	Batch	Batch
Donvale	QA Description		Duplicate	Duplicate % RPD	Spike % Recovery	% Recovery	
Victoria 3111	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009
Analysis Type	**Units**			% RPD	% Recovery	% Recovery	mg/L
Monocyclic Aromatic Hydrocarbons		Batch	Batch	Batch	Batch		
Benzene		-	-	< 1	76	123	< 0.05
Toluene		-	-	< 1	75	104	< 0.05
Ethylbenzene		-	-	< 1	82	102	< 0.05
Xylenes(ortho.meta and para)		-	-	< 1	83	104	< 0.05

COMMENTS:

3 Kingston Town Close, Oakleigh, Victoria 3166, Australia
Postal address: P. O. Box 276, Oakleigh, Victoria 3166, Australia
Telephone: (03) 9564 7055
Fax: (03) 9564 7190
Email: mgt@mgtenv.com.au

Diomides & Associates Pty. Ltd.	Client Sample ID	BH2 0-0.15M	BH2 0-0.15M	RPD	SPIKE	LCS	Method blank
11 Conway Ave	Lab Number	09-Ap08778	09-Ap08778	09-Ap08778	09-Ap08778	Batch	Batch
Donvale	QA Description		Duplicate	Duplicate % RPD	Spike % Recovery	% Recovery	
Victoria 3111	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009
Analysis Type	**Units**			% RPD	% Recovery	% Recovery	mg/L
Total Recoverable Hydrocarbons		Batch	Batch	Batch	Batch		
TRH C6-C9 Fraction by GC		-	-	< 1	96	84	< 20
TRH C10-C14 Fraction by GC		-	-	< 1	101	104	< 50
TRH C15-C28 Fraction by GC		-	-	16	-	-	< 100
TRH C29-C36 Fraction by GC		-	-	19	-	-	< 100
Heavy Metals		Batch	Batch	Batch	Batch		
Mercury		-	-	< 1	81	98	< 0.1

COMMENTS:

3 Kingston Town Close, Oakleigh, Victoria 3166, Australia
Postal address: P. O. Box 276, Oakleigh, Victoria 3166, Australia
Telephone: (03) 9564 7055
Fax: (03) 9564 7190
Email: mgt@mgtenv.com.au

Diomides & Associates Pty. Ltd.	Client Sample ID	BH3 0-0.15M	BH3 0-0.15M	RPD	SPIKE	LCS	Method blank
11 Conway Ave	Lab Number	09-Ap08780	09-Ap08780	09-Ap08780	09-Ap08780	Batch	Batch
Donvale	QA Description		Duplicate	Duplicate % RPD	Spike % Recovery	% Recovery	
Victoria 3111	Matrix	Soil	Soil	Soil	Soil	Soil	Soil
	Sample Date	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009	Apr 28, 2009
Analysis Type	**Units**			% RPD	% Recovery	% Recovery	mg/L
Polycyclic Aromatic Hydrocarbons		Batch	Batch	Batch	Batch		
Acenaphthene		-	-	< 1	104	97	< 0.1
Acenaphthylene		-	-	< 1	100	102	< 0.1
Anthracene		-	-	< 1	110	117	< 0.1
Benz(a)anthracene		-	-	< 1	115	107	< 0.1
Benzo(a)pyrene		-	-	< 1	112	113	< 0.1
Benzo(b)fluoranthene		-	-	< 1	100	94	< 0.1
Benzo(g.h.i)perylene		-	-	< 1	113	101	< 0.1
Benzo(k)fluoranthene		-	-	< 1	104	116	< 0.1
Chrysene		-	-	< 1	118	121	< 0.1
Dibenz(a.h)anthracene		-	-	< 1	130	118	< 0.1
Fluoranthene		-	-	< 1	95	88	< 0.1
Fluorene		-	-	< 1	99	105	< 0.1
Indeno(1.2.3-cd)pyrene		-	-	< 1	114	107	< 0.1
Naphthalene		-	-	< 1	83	92	< 0.1
Phenanthrene		-	-	< 1	109	109	< 0.1
Pyrene		-	-	< 1	96	102	< 0.1

COMMENTS:

CHAIN OF CUSTODY

Attention: MGT

Client: Diomides & Associates
Location: Brunswick
Project/No: DA 1468
Sample Type(s): Soil
Date Sampled: 28/04/09

DIOMIDES & ASSOCIATES PTY LTD
ENVIRONMENTAL CONSULTANTS
A.C.N. 056 657 848
11 Conway Avenue
Donvale
Victoria 3111
Ph: (03) 9842 2000
Fax: (03) 9842 0322

CHEMICAL ANALYSIS

SAMPLE IDENTITY	DEPTH	Suite 6 - TPH/BTEX/PAH/ Metals (inc Hg)	OC Pesticides & PCBs							
BH 1	0-0.15m	√	√							
BH 1	0.6m	√								
BH 2	0-0.15m	√	√							
BH 2	0.6m	√								
BH 3	0-0.15m	√	√							
BH 3	0.4m	√								
										6

Total No. of Containers

REMARKS

1. Standard turn around time for results please.
2. Please email a signed copy of this chain of custody on receipt to sdiomides@diomides.com.au
3. Please email results to the following email addresses:
   sdiomides@diomides.com.au
   cdiomides@diomides.com.au

244 519

Sampled by: Costa Diomides
Relinquished by: Costa Diomides **Organisation:** Diomides & Ass **Received by:** JAMEJ **Organisation:** MST
Date: 28/04/09 **Time:** 3.00 pm **Date:** 28/4 **Time:** 5:10pm
Relinquished by: _____ **Organisation:** _____ **Received by:** _____ **Organisation:** _____
Date: _____ **Time:** _____ **Date:** _____ **Time:** _____

Environmental Consulting Pty. Ltd.

3 Kingston Town Close, Oakleigh, Victoria 3166, Australia
Postal address: P. O. Box 276, Oakleigh, Victoria 3166, Australia
Telephone: (03) 9564 7055
Fax: (03) 9564 7190
Email: mgt@mgtenv.com.au

Sample Receipt Advice

Company name:	Diomides & Associates Pty. Ltd.
Contact name:	Costa Diomides
Client job number:	BRUNSWICK DA 1468
COC number:	Not provided
Turn around time:	Five day
Date received:	Apr 28, 2009
MGT lab reference:	244519

Sample information

- ☑ All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- ☒ All samples were provided chilled.
- ☑ Appropriately preserved sample containers have been used.
- ☑ All samples were received in good condition.
- ☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

Contact notes

If you have any questions with respect to these samples please contact:

Rhonda Chouman on the above number or by e.mail:
rchouman@mgtenv.com.au

Results will be delivered electronically via e.mail to Costa Diomides - cdiomides@diomides.com.au.

mgt Sample Receipt

A division of Enviro-Net Australia Pty. Ltd.
ABN 39 067 499 389 ACN 067 499 389 NATA Reg. 3110
Unit 2-2B Parker Street, Footscray, Victoria 3011
Ph: (03) 9689 6440 Fax: (03) 9689 6470
Email: esp@esplabs.com.au

Melbourne
Sydney
Newcastle
Launceston

ASBESTOS IDENTIFICATION REPORT

DATE:	04 MAY 2009
ESP JOB NUMBER:	13787L
NAME:	DIOMIDES & ASSOCIATES
ADDRESS:	11 CONWAY AVENUE DONVALE, VIC 3111
ATTENTION:	COSTA DIOMIDES
SAMPLED FROM:	AS RECEIVED (BRUNSWICK, PROJECT NO: DA 1468)
SAMPLED BY:	AS RECEIVED
DATE RECEIVED:	30 APRIL 2009
TEST METHOD:	Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including dispersion staining, using ESP in-house Method No. 2 and in accordance with AS 4964-2004.

LAB. NO.	SAMPLE DESCRIPTION	RESULT
E013626	SUB 1: BH2 0.6M: SOIL (30 x 30 x 35mm)	NO ASBESTOS DETECTED
	SUB 2: BH2 0.6M: FLAT FIBRO CEMENT SHEET (25 x 40 x 5 mm)	CHRYSOTILE ASBESTOS DETECTED

The results contained in this report relate only to the sample(s) submitted for testing. ESP Environmental & Safety Professionals accepts no responsibilities for the representivity of the sample(s) submitted.

R Boast.

Ray Boast
Approved Identifier / Approved Signatory

WORLD RECOGNISED ACCREDITATION

NATA Accredited Laboratory
Number: 3110

This document is issued in accordance with NATA's Accreditation requirements.
Accredited for compliance with ISO/IEC 17025

CHAIN OF CUSTODY

Attention: ESP

Client: Diomides & Associates
Location: Brunswick
Project/No: DA 1468
Sample Type(s): Soil
Date Sampled: 28/04/09

DIOMIDES & ASSOCIATES PTY LTD
ENVIRONMENTAL CONSULTANTS
A.C.N. 056 657 848
11 Conway Avenue
Donvale
Victoria 3111
Ph: (03) 9842 2000
Fax: (03) 9842 0322

CHEMICAL ANALYSIS

SAMPLE IDENTITY	DEPTH	Asbestos								
BH 2	0.6m	√								
										1

REMARKS

1. Please refer pricing to David Whiting and issue invoice to Diomides & Associates Pty Ltd.

2. Three day turn around time for results please.

3. Please fax a signed copy of this chain of custody on receipt to (03) 9842 0322 or email to sdiomides@diomides.com.au

4. Please email results to the following email addresses:
sdiomides@diomides.com.au
cdiomides@diomides.com.au

Total No. of Containers

Sampled by: Costa Diomides
Relinquished by: Costa Diomides **Organisation:** Diomides & Ass
Date: 28/04/09 **Time:** 3.00 pm
Relinquished by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Received by: Ray Boots **Organisation:** ESP
Date: 30/4/09 **Time:** 5.05 PM
Received by: _____ **Organisation:** _____
Date: _____ **Time:** _____

30. Apr. 2009 18:03 ESP ENVIROMENTAL No. 2391 P. 1/1

D&A

DIOMIDES &
ASSOCIATES PTY LTD

ACN 056 657 848
ABN 99 562 502 680

Environmental Consultants
11 Conway Avenue, Donvale VIC 3111
Phone: (03) 9842 2000 Fax: (03) 9842 0322
Web: www.diomides.com.au

Report

to

RODEN STREET PTY LTD

SITE CONTAMINATION ASSESSMENT

101-105 Hope Street, Brunswick, Victoria

JUNE 26, 2012 CD1379 DA1468

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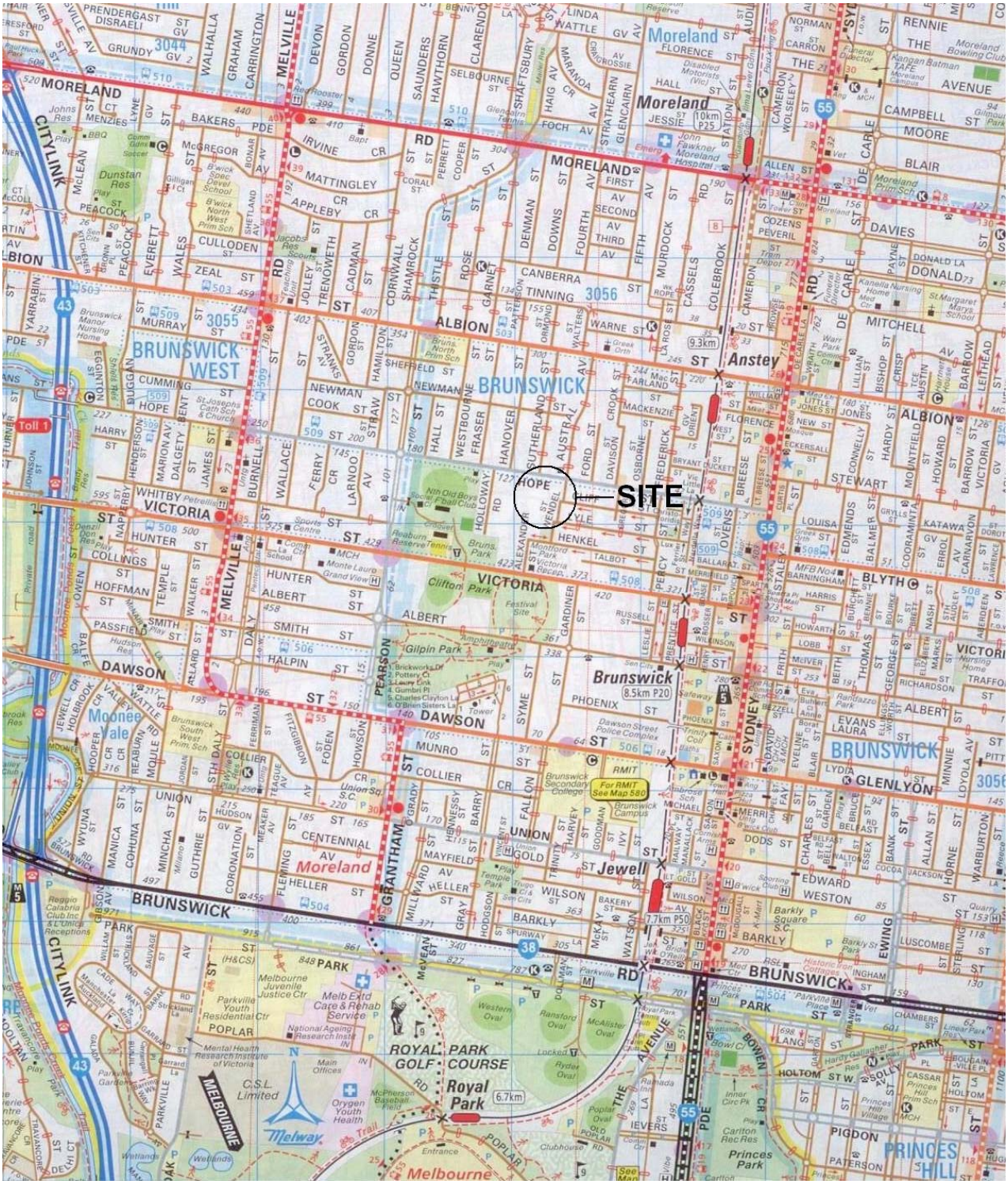
ABBREVIATIONS

AMG	Australian Map Grid
AS	Australian Standard
AST	Aboveground Storage Tank
ANZECC	Australian and New Zealand Environment and Conservation Council
BH	Borehole
BLIND	Blind Replicate Sample
BTEX	Benzene, Toluene, Ethyl benzene, Xylenes
COC	Chain of Custody
CUTEP	Cleanup to the Extent Practicable
DO	Dissolved Oxygen
EC	Electrical Conductivity
EIL	Ecological Investigation Level
EPA	Environment Protection Authority
GW	Groundwater Well
HIL	Health Investigation Level
LOR	Level of Reporting
mg/kg	Milligrams per kilogram
µg/L	Micrograms per litre
mg/L	Milligrams per litre
MAHs	Monocyclic Aromatic Hydrocarbons
MGT-Labmark	MGT-Labmark Environmental Laboratories
NAPL	Non-aqueous Phase Liquid
NATA	National Association of Testing Authorities
NEPM	National Environmental Protection Measure
NHMRC	National Health & Medical Research Council
OCPs	Organochlorine Pesticides
OPPs	Organophosphorus Pesticides
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Poly Chlorinated Hydrocarbon
PID	Photo Ionisation Detector
PSH	Phase Separated Hydrocarbons
QA	Quality Assurance
QC	Quality Control
RPD	Relative Percent Difference
SEPP	State Environment Protection Policy
SMHSP	Soil Management & Health and Safety Plan
SPLIT	Split Sample
SVOCs	Semi-volatile Organic Compounds
SWL	Standing Water Level
TDS	Total Dissolved Solids
TIT	Triple Interceptor Trap
TP	Test Pit
TPH or TRH	Total Petroleum Hydrocarbons or Total Recoverable Hydrocarbons
UST	Underground Storage Tank
VHC	Volatile Halogenated Compounds
VOCs	Volatile Organic Compounds

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA 1468 ---------- **DATE:** June, 2012



LOCALITY PLAN		**FIGURE 1**

1.0 INTRODUCTION

This report presents the results of a site contamination assessment carried out by Diomides & Associates Pty Ltd for the property located at 101 – 105 Hope Street, Brunswick, Victoria. A locality plan which shows the location of the subject site has been included as Figure 1.

Diomides & Associates Pty Ltd was commissioned by Mr Joe Di Monte of Roden Street Pty Ltd to conduct a site contamination assessment and to prepare this report. The investigations were carried out generally in accordance with the Diomides & Associates proposal dated May 4, 2012. The work was authorised by Mr Di Monte by written authorisation dated May 8, 2012.

Mr Di Monte will also need to appoint an EPA Contaminated Land Auditor to conduct a statutory environmental audit of the subject site, including an audit of the work being conducted by Diomides & Associates, with a view to issuing a Certificate or Statement of Environmental Audit for the subject site in accordance with Part IXD of the Environment Protection Act 1970 of Victoria.

Diomides & Associates Pty Ltd previously prepared a Preliminary Soil Contamination Assessment report dated May 21, 2009 for the subject site and presented the procedures and results of the preliminary soil investigations including a site use history assessment.

2.0 OBJECTIVES & SCOPE OF WORK

The objectives & scope of work for this project include the following:

. to conduct a site use history assessment;

. to investigate the chemical nature and general distribution of any subsurface contamination within the subject site by implementing a drilling, sampling, and chemical analysis programme; and,

. to report on the results of investigations, including field observations, results of chemical analyses and an appraisal of the significance of any contaminant levels, and the implications of these, together with any relevant recommendations.

3.0 BACKGROUND

3.1 General

The property which is the subject of this site contamination assessment consists of the land located at 101 – 105 Hope Street, Brunswick, as defined by the Land Victoria Property Report and the Certificate of Title documentation that are attached as Appendix A. It should be noted that the area under investigation does not include the whole site and only includes approximately 1,200 square metres located at the

northern end of the site (i.e. mostly the former car park area & office building) of the subject site. The subject site can be identified as Lot 2 on Plan of Subdivision 89346 (Volume 08874 Folio 438). The property is located on the southern side of Hope Street and approximately 50 metres west of Wendel Street. The subject site covers a total area of approximately 1,200 square metres, has a frontage of approximately 33.8 metres along Hope Street and a depth of approximately 36.5 metres. See Figure 2 – Site Plan.

It is understood that the subject site is to be redeveloped from its current commercial/industrial use into a higher density residential use, excluding a basement car park and no in-ground landscaping. A copy of the development plans are attached as Appendix B. A planning permit was not available at the time of reporting.

The Land Victoria Property Report indicates that an Environmental Audit Overlay applies to the land and that an EPA Contaminated Land Auditor will need to be appointed to conduct a statutory environmental audit of the subject site, with a view to issuing a Certificate or Statement of Environmental Audit for the subject site in accordance with Part IXD of the Environment Protection Act 1970.

3.2 Site Inspection

The site inspection carried out by our company on May 11, 2012, revealed that the subject property is located on fairly flat, inner urban land and covers a total area of approximately 1,200 square metres. The direction of the closest water bodies to the subject site include: (i) Moonee Ponds Creek located approximately 1.5 kilometres

west of the site; (ii) Merri Creek located approximately 2.7 kilometres east of the site; (iii) the Maribyrnong River located 4.7 kilometres west of the site; and, (iv) the Yarra River located approximately 5.4 kilometres south-east of the subject site. Based on topography it is considered that the surface water and local groundwater are likely to flow in a westerly to south-westerly direction.

The subject site is occupied by a double storey office that is currently vacant and located in the north-eastern corner of the site. The office is constructed of brick walls and sheet metal roofing and is currently sealed with a concrete floor slab that appears to be in good condition and shows no obvious signs of staining. A brick-paved car park was located immediately west of the office building. The former commercial/industrial warehouse was previously located immediately south of the office building/car park. The commercial/industrial warehouse has since been demolished and only the concrete slab of the former building is present and the northern wall of the commercial/industrial warehouse. A concrete driveway runs along the western boundary of the subject site.

Fill material may have been historically imported onto the subject site and used to level the concrete floor slabs of the subject site given that the site is located with in the inner suburbs of Melbourne.

The site inspection did not reveal any aboveground storage tanks (AST), underground storage tanks (UST), triple interceptor traps (TIT), filler points, bowsers, breather pipes, pits or sumps within the boundaries of the subject site, other than stormwater pits.

In summary, the site inspection revealed that:

- The subject site is occupied by a double storey office building that is currently vacant and located in the north-eastern corner of the subject site;

- The office is constructed of brick walls, sheet metal roofing and has a concrete floor slab that appears to be in good condition;

- A brick-paved car park is located immediately west of the office building. The former commercial/industrial warehouse was previously located immediately south of the office building/car park;

- The commercial/industrial warehouse has since been demolished and only the concrete slab of the former building is present and the northern wall of the commercial/industrial warehouse;

- Fill material may have been historically imported onto the subject site and used to level the concrete floor slabs of the subject site given that the site is located with in the inner suburbs of Melbourne;

- No aboveground storage tanks (AST), underground storage tanks (UST), triple interceptor traps (TIT), filler points, bowsers, breather pipes, pits or sumps were found at the subject site.

3.3 Nearby Surrounding Properties

The subject site is surrounded by properties with a variety of uses consisting of residential and commercial properties. The current neighbouring properties located at the following addresses consist of properties with the following site uses:

- 73 to 95 and 107 to 125 Hope St. = Individual residential houses;
- 72 to 128 Hope St. = Individual residential houses;
- 97-99 Hope St. = Proforce Security Services office (Commercial use);
- 28 to 44 & 17 to 35 Cliff St. = Individual residential houses;
- 40 to 74 and 21 to 55 Lyle St. = Individual residential houses;
- 57 & 76 Lyle St. = VSM and N.S.M. Food Wholesalers respectively (commercial use);
- 102 Henkel St. = B. K. Group metal manufacturers (Commercial/industrial use). Inspection revealed that this warehouse has two vent pipes that may be associated with two possible USTs located along the western wall;
- 1 Wendel St. = Unknown timber building & vacant site (Commercial use?);
- 5-13 Wendel St. = Unknown office & storage (Commercial use);
- 1 to 29 & 8 to 32 Holloway Rd. = Individual residential houses;
- 411 Victoria St. = Unknown warehouse (Commercial/industrial use);
- 415 Victoria St. = Victoria Funerals (Commercial use);
- 419 Victoria St. = Bass Foods Direct/Melbourne Meat Co. (Commercial use); and,
- 421 Victoria St. = Raychem Brunswick (Commercial/industrial use).

It would appear that none of the current uses of the neighbouring properties would warrant significant concern regarding potential off site sources of contamination impacting on the subject site considering that the mentioned properties are currently used for low risk purposes with respect to potentially contaminating land uses. The commercial/industrial properties located nearby are located a considerable distance from the site. A summary of the historical uses for the neighbouring properties is included in Section 3.6 - Site History.

3.4 Priority Sites Register & Nearby Environmental Audits

Examination of the Environment Protection Authority's Priority Sites Register dated May 23, 2012, indicated that the site is not listed on the register. Similarly, examination of the Environment Protection Authority's list of issued Certificates and Statements of Environmental Audit dated June, 2012, indicated that the subject site is not listed. Certificates and Statements of Environmental Audit have been issued for the following nearby sites listed in Appendix C1. Diomides & Associates have reviewed the five closest statutory environmental audit reports as part of this assessment work and tabulated the review of nearby audits in Appendix C2.

3.5 Groundwater Database Search

The results of a groundwater database search carried out by Diomides & Associates are presented in this report for eleven groundwater bores located within a two kilometre radius of the subject site. Ten of these groundwater bores are located south-west of the subject site and one is located north-east of the site. Five of these bores

are used for SEC unidentified use, one bore is used for dewatering purposes and the remaining five are used for groundwater investigation purposes.

According to the groundwater database search, the five closest bores are located approximately 1.07 kilometres south-west of the subject site. The bores were drilled in 1974 to total depths ranging between 2.44 to 6.1 metres below ground level and were used for unknown SEC purposes. However, no other information was reported in relation to chemical or compositional data.

The next closest bore is located approximately 1.47 kilometres south-west of the subject site. This bore was drilled in 1983 to a total depth of 3.9 metres below ground level and was used for groundwater dewatering purposes. The data for the bore indicates that the screen was installed from approximately 3 to 3.5 metres with a standing water level at 3 metres below ground level. The bore was drilled into a basalt aquifer. However, no other information was reported in relation to chemical data.

The next four closest bores are located approximately 1.62 kilometres south-west of the subject site. These bores were drilled in 1999 and 2000 to total depths of 9 to 10 metres below ground level and were used for groundwater investigation purposes. The data for these bores indicates that the screen was installed from approximately 6 or 7 metres to 9 or 10 metres below ground level. However, no other information was reported in relation to chemical or compositional data.

Further information relating to other groundwater bores was accessed from the DNRE groundwater database. However, this data was not considered to be sufficiently

relevant because the bores were located further away from the subject site. Limited information relating to chemical and compositional data was available for some of the additional groundwater bores and limited information was available for regional aquifers that targeted deeper aquifers. A table summarising the results of the groundwater database search is attached as Appendix D.

3.6 Site History

In conjunction with the site inspection by an environmental specialist, a site use history assessment was conducted using information obtained from Moreland City Council, examination of the latest edition of the EPA's Priority Sites Register, the EPA's List of Issued Certificates and Statements of Environmental Audit, discussions with previous owners/occupiers, geological survey maps, aerial photographs, the Sands & McDougall Directory of Victoria, Land Victoria property report, Certificate of Title documentation, Planning scheme maps, Melbourne & Metropolitan Board of Works Plans and old maps of the area.

The certificate of title documents, attached as Appendix A, indicate that 101-105 Hope Street is currently listed under the name Roden Street Pty Ltd who purchased the site in November 2009. In October 1995, the subject site was listed under the name Branic Pty Ltd. During the period from June 1972 to October 1995 the property was listed under the name Gatic (Australia) Pty Ltd and from January 1971 to June 1972 the property was listed under the name Reljak Investments Pty Ltd.

Diomides & Associates spoke to Mr. Joe Di Monte of Roden Street Pty Ltd (client) who indicated that he purchased the subject site 2009. Mr Di Monte also indicated that he

plans to redevelop the northern part of the property for higher density residential purposes (i.e. subject site under investigation) and use the southern part of the site as commercial/industrial use. The northern section of the property was leased out to a consulting and training services company (Success Fast-Track) and used as an office. Mr. Di Monte indicated that to his knowledge there are no aboveground or underground storage tanks located on-site and there are no sumps, pits or triple interceptor traps on-site.

According to the previous owner, Mr. Richard Kermonde of Branic Pty Ltd, the subject site was purchased in 1995. The northern section of the property was leased out to a consulting and training services company (Success Fast-Track) and used as an office. The office was previously leased out to an accounting company known as Dailey & Co. Chartered Accountants. The warehouse located at the southern end of the property was used by a metal manufacturing company – B. K. Group Pty Ltd who manufactured spouting, covers, lids, skylights and other metal sheet products. Metal was stored on-site and used to manufacture various metal products. The main processes used on-site included: metal grinding and sheet metal works. No chemicals were stored or used on-site.

The subject site was previously owned and occupied by Gatic Australia who operated and iron foundry on-site. Gatic Australia manufactured metal plates, covers and lids. Diomides & Associates were shown an old bitumen coating area located on-site (southern area of site) that was used by Gatic Australia to coat metal products with a bitumen coating. The process involved dipping the metal pieces into a bitumen bath from an overhead cable/pulley system. The bitumen coating system was extremely old

and had not be used for a long time. Mr. Kermonde indicated that to his knowledge there are no aboveground or underground storage tanks located on-site and there are no sumps or pits other than what is possibly a triple interceptor trap located at the front of the site in the car park area.

Diomides & Associates contacted Mr. Vern Tedge who was the production manager of Marbut Moulding Pty Ltd and worked at the subject site between the years 1913 to 1963. Mr. Tedge informed our company that Marbut Moulding first began production at the subject site in approximately 1915/1916 and used the site to manufacture timber mouldings that were used by picture framers, cabinet makers, furniture manufacturers and chapel fitters. Many years later, Marbut Moulding also established an engineering shop on-site to service there own equipment. Mr. Tedge informed Diomides & Associates that no chemicals were stored or used on-site other than paints that were used to hand paint various timber products. Marbut Moulding did not produce any waste other than timber scraps and did not conduct any other chemical processes. Mr. Tedge indicated that, prior to Marbut Moulding occupying the subject site, the site was previously used for crop growing/grazing cows and may have had two or three residential houses located on-site. Most areas surrounding the site were vacant paddocks during the early 1900's with a clay quarry located immediately south of the subject site.

Diomides & Associates contacted WorkSafe Victoria who advised that they have no records of dangerous goods storage and handling including any aboveground or underground storage tanks registered with WorkSafe for the subject site. Copies of the letters received from WorkSafe Victoria have been attached as Appendix E.

Information obtained from the Sands & McDougall Directory of Victoria indicates that from 1924 to 1974, the subject site was occupied by Marbut Moulding Pty Ltd. For the years 1904 and 1914 the subject site was not listed and presumably consisted of undeveloped land. This information would appear to be consistent with the information provided by Mr. Tedge. A summary of the Sands & McDougall Directory of Victoria has been included as Appendix F providing details of the individual listings for the site.

The Sands & McDougall Directory of Victoria was also searched in order to gain information regarding the surrounding properties to the subject site. Most properties surrounding the subject site between the years from 1904 to 1974 were mainly listed under individual private names and presumably used for residential purposes, except for a small number of commercial/industrial properties located along Hope Street and Victoria Street. Some of the commercial/industrial properties surrounding the subject site included: a brass foundry, engineering companies, a paving company, transport companies, sand supplies company, cartage contractors, brush manufacturers, an electroplating company, a communications company, boot repairers/makers, a concrete works company, iron founders, leather goods manufacturer, sawmills, nail manufacturer, wood yard, cast maker, roofing material manufacturer, motor garage and pottery companies associated with the clay quarry. A summary of the Sands & McDougall Directory of Victoria has been included as Appendix F providing details of the individual listings for the properties surrounding the subject site.

Diomides & Associates examined old maps of the area dating back to 1906, produced by the Melbourne & Metropolitan Board of Works (MMBW). Specifically, Detailed Plan No. 1902 produced in the year 1908 and Detail Plan No. 1903 produced in the year 1906 covered the subject site and indicated that the subject site consisted of vacant

land. There were no signs of quarries located on the subject site in 1906 and 1908, however, a number of clay quarries were located immediately to the south, south-east and south-west of the subject site. The land located immediately to the west of the subject site would appear to be vacant land. The neighbouring land to the south and east appears to be occupied by residential dwellings followed by more vacant land. The MMBW plan is included as Appendix G.

The site use history assessment included the examination of aerial photographs dating back to 1951. The 1951 aerial photograph indicates that the subject site consisted of a large factory warehouse that occupies the southern part of the site and consisted of a car park or vacant storage area at the northern end of the site. A shed or small warehouse was also located in the north-western corner of the subject site. The 1951 aerial photograph indicates that the subject site has no visible vegetation on-site and that the neighbouring properties located immediately to the south, east and west appear to be used for commercial/industrial purposes. The neighbouring properties located north of the subject site appear to be residential properties with more residential properties located further east and west of the commercial/industrial properties surrounding the site. A large quarry is visible immediately south of Victoria Street.

The 1968 aerial photograph indicates that the subject site consisted of a large factory warehouse that occupies the southern part of the site and consisted of a car park or vacant storage area at the northern end of the site. An office building or shed has been re-built in the north-eastern corner of the subject site. The 1968 aerial photograph indicates that the subject site has no visible vegetation on-site and that the

neighbouring properties located immediately to the south, east and west appear to be used for commercial/industrial purposes. The neighbouring properties located north of the subject site appear to be residential properties with more residential properties located further east and west of the commercial/industrial properties surrounding the site. The large quarry that was previously located south of Victoria Street appears to have been filled.

The 1982 aerial photograph indicates that the subject site consisted of a large factory warehouse that occupies the southern part of the site and consisted of a car park or vacant storage area at the northern end of the site. An office building is located in the north-eastern corner of the subject site. The 1982 aerial photograph indicates that the subject site has no visible vegetation on-site and that the neighbouring properties located immediately to the south, east and west appear to be used for commercial/industrial purposes. The neighbouring properties located north of the subject site appear to be residential properties with more residential properties located further west of the commercial/industrial properties surrounding the site.

The 2007 photograph indicates that the subject site is occupied by the same buildings that were previously described in the 1982 aerial photograph. The subject site has no visible vegetation present. The neighbouring properties immediately to the south and east consist of commercial/industrial properties. Neighbouring properties located north and west of the site are used for residential purposes. There is no evidence in the 1968, 1982 or 2007 photograph of any quarrying or related operations on the subject site or neighbouring sites. Copies of the 1951, 1968, 1982 and 2007 aerial photographs are attached as Appendix H.

A summary of the Site Use History assessment has been presented in Table 1.

Table 1. Summary of Site History for 101-105 Hope Street, Brunswick

Year	Owner	Site Use	Source of Information
Nov 2009 to current	Roden Street Pty Ltd	Subject site leased out to a company that provides management training and consulting (Success Fast-Track). In more recent time the subject site has remained vacant.	Certificate of Title & Communications with Mr. Joe Di Monte.
Oct 1995 to Nov 2009	Branic Pty Ltd	The northern office is leased out to a company that provides management training and consulting (Success Fast-Track). Previously leased out to an accounting company called Dailey & Co Chartered Accountants. The southern part of the factory warehouse was used for the storage and manufacture of metal products (E.g. sheet metal, spouting, covers/lids & skylights) by a company called B. K. Group Pty Ltd. The front part of the factory warehouse has remained vacant for approximately 25 years.	Certificate of Title, Aerial photographs (2007) & Communications with Mr. Richard Kermonde.
June 1972 to Oct 1995	Gatic (Australia) Pty Ltd	Iron foundry operated by Gatic (Australia) Pty Ltd. During the 1970's was leased by Marbut Moulding Pty Ltd.	Certificate of Title, Aerial photographs (1982) & Communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).

Table 1 (Cont…). Summary of Site History for 101-105 Hope Street, Brunswick

Year	Owner	Site Use	Source of Information
Jan 1971 to June 1972	Reljak Investments Pty Ltd	Leased to Marbut Moulding Pty Ltd (timber moulding makers and motor engineers).	Certificate of Title, Sands & McDougall's Directory of Victoria and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).
1924 to 1971	Unknown	Leased to Marbut Moulding Pty Ltd (timber moulding makers and motor engineers).	Sands & McDougall's Directory of Victoria, Aerial photographs (1951 & 1968) and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).
1904 to 1914	Unknown	Mr. Tedge indicated that most of the site was vacant land used for crops and grazing cows with two or three houses located on-site. In 1906 & 1908 MMBW Plan show most of the site to be vacant with possibly three houses located approximately in the centre of the site. No quarries appear on subject site, however, large quarries are located immediately south of the site.	Sands & McDougall's Directory of Victoria and MMBW Plan Nos. 1902 & 1903 and communications with Mr. Vern Tedge (Production Manager at Marbut Moulding Pty Ltd).

3.7 Potential Contaminants of Interest

Potential contaminants of interest associated with the past and present activities conducted on the subject site have been summarised in Table 2.

Table 2. Potential Contaminants of Interest

Activity	Potential Contaminants
Storage and manufacturer of metal products	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Iron foundry	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Timber moulding makers and motor engineers	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, PCBs and Phenols.
Farm land used for crops and grazing	Metals screen including mercury, hexavalent chromium, TRH, BTEX PAH, and OC pesticides.
Potentially imported fill material	Metals screen including mercury, hexavalent chromium, TRH, BTEX, PAH, Volatile & Semi-volatile Chlorinated hydrocarbons, OC pesticides, PCBs, Fluoride, Cyanide, pH, Sulphate, Phenols and Asbestos.

4.0 FIELD INVESTIGATION

4.1 General

An experienced senior environmental scientist from Diomides & Associates Pty Ltd was responsible for all fieldwork including the selection of sampling locations, collection of soil samples for site contamination assessment, logging of soil profiles, providing field contamination readings, and ensuring that all samples were delivered to the specified NATA registered analytical laboratories without delay. Directions were provided to the relevant laboratories by the Project Manager, giving details of analyses required for each sample.

4.2 Drilling of Boreholes/Excavation of Test Pits and Sampling

On May 11 2012, a hand auger was used to drill two boreholes and a mechanical excavator was used to excavate four test pits at selected locations in a grid layout in order to characterise site soils within the boundaries of the subject site. The area where a triple interceptor trap (TIT) was thought to be located proved to be a fire service water main. As a result no further investigation works were required in the vicinity of the fire service water main. The six sampling locations were selected and marked out by a senior environmental scientist from Diomides & Associates. The locations of all boreholes/test pits are shown in Figure 2 – Site Plan.

Each of the boreholes and test pits were drilled or excavated to depths ranging from approximately 0.6 to 0.7 metre below ground level. Discreet samples of soil were

recovered from each of the boreholes/test pits at depths ranging between 0.1 metres and 0.5 metres below existing ground level. Descriptions of materials encountered and depths at which samples were collected are presented in Appendix I – Borehole/Test Pit logs.

In accordance with our quality assurance procedures and instructions from the Project Manager, all primary soil samples collected were analysed by MGT-Labmark Environmental Laboratories (MGT-Labmark). For quality assurance purposes a split sample and blind replicate sample were recovered during the field sampling program. The blind replicate sample was submitted to MGT-Labmark. The blind replicate and split sample were taken from a larger than normal quantity of soil or fill collected from the same sampling point and divided into separate vessels. The blind replicate sample and split sample were sourced from BH 2 at a depth of 0.3 to 0.4 metres. The split sample was submitted to a second NATA registered laboratory – Envirolab Services Pty Ltd (Envirolab), for analysis.

All sampling equipment used to retrieve soil samples was cleaned prior to the recovery of each sample in accordance with the following procedures:

. all adhered soil was removed by means of scrubbing and flushing with clean water;

. the pre-cleaned sampling equipment was scrubbed in a phosphate free detergent solution before being rinsed copiously in clean water;

- clean water was used to finally rinse the sampling equipment used to recover the samples; and,

- disposable latex gloves worn by the field operators were replaced prior to the recovery of each sample.

In accordance with our quality assurance procedures and instructions from the Project Manager, a rinsate sample was collected from the final washing solution conducted on the drilling equipment. Cross contamination issues were not considered to be an issue in the field sampling stage or during the transportation stage, however, a field blank sample was analysed to determine the presence of any potential cross contamination issues during the field sampling stage of field work.

All samples were stored in pre-washed glass jars under cool conditions prior to delivery to the laboratory for chemical analysis. Each sample jar was clearly labelled with the following information:

- DA1468 (Job Number);
- Sample Number;
- Depth of sample; and,
- Sampling Date.

During the sampling of boreholes and test pits, particular note was taken of possible contamination, as evidenced by visual and odour criteria. A method of field contamination assessment for soil was utilised, based on these criteria.

The system of classification is summarised below:

Rank	Description
0	No odour or visual evidence of contamination
1	Slight odour and/or slight visual evidence of contamination
2	Visual evidence of contamination and /or odour
3	Obvious visual evidence of contamination and/or strong odour

The rank of each soil sample is presented in Appendix I – Borehole/Test Pit Logs.

Measurement of volatile organic hydrocarbon concentrations was conducted using a MiniRae 2000 Photo-ionisation Detector. The procedure applied during PID screening is as follows:

1. Soil samples are collected in glass screw capped jars with the jar filled approximately half full to allow for head space;

2. The jar is immediately sealed with foil that is secured in place with an elastic band to ensure an air tight seal to prevent loss of volatiles after each sample is recovered;

3. The samples are left for at least fifteen minutes to allow volatile head space to accumulate;

4. The PID unit is used to measure the volatile head space in the sample jar by piercing a small hole in the foil lid using the probe of the PID unit. Once the PID measurement has reached a maximum concentration, the PID probe is removed and the measurement is recorded on the field log sheet for each sample.

The results of the soil vapour assessment are presented in Appendix I. A calibration certificate for the PID has been included in Appendix J. In addition, each soil sample was carefully examined for possible contamination, as evidenced by visual and odour criteria as previously discussed.

The laboratory analysis results for the site contamination assessment samples are summarised in Appendix K and the full laboratory reports are attached as Appendix L - Laboratory Reports for Soil Samples.

5.0 CHEMICAL ANALYSES

All soil samples were submitted to MGT-Labmark as the primary laboratory and to Envirolab Services Pty Ltd as the secondary laboratory for analysis of all individual soil samples. Both laboratories have advised that they are NATA registered for all chemical analyses required in this investigation. A summary of laboratory results has been presented in Appendix K for all soil samples. The full results of laboratory analyses for all soil samples are presented in Appendix L with details of the laboratory quality assurance procedures in all cases. The range and number of chemical analyses performed on soil samples for this investigation are indicated in Table 3.

TABLE 3. Range and Number of Chemical Analyses Performed

Constituent	Sample Soil	Blind/Split Soil	Rinsate	Field Blank
Arsenic	12	2	1	0
Cadmium	12	2	1	0
Chromium (Total)	12	2	1	0
Chromium (Hexavalent)	3	0	0	0
Copper	12	2	1	0
Lead	12	2	1	0
Mercury	12	2	0	0
Molybdenum	3	0	0	0
Nickel	12	2	1	0
Selenium	3	0	0	0
Silver	3	0	0	0
Tin	3	0	0	0
Zinc	12	2	1	0
PAH	12	2	0	0
TRH & BTEX	12	2	0	1
Organochlorine Pesticides	5	0	0	0
PCBs	5	0	0	0
Volatile Organic Compounds	3	0	0	0
Cyanide & Fluoride	3	0	0	0
Phenols	3	0	0	0
Sulphate	3	0	0	0
pH	4	0	0	0

6.0 RESULTS OF INVESTIGATION

6.1 Geology & Hydrogeology

The 1-250,000 Geological Survey of Victoria Melbourne Sheet indicates that the subject site is underlain by silty clays and boulders derived from the underlying basalt of the Quaternary Aged Newer Volcanics.

Hydrogeological information obtained from the Department of Sustainability and Environment – Groundwater in Metropolitan Melbourne indicates that this area of Brunswick is within the Newer Volcanics – Basalt aquifer. The aquifer depth typically ranges from the surface down to approximately 200 metres. Common salinity ranges for this particular aquifer range between approximately 3,500 to 13,000 mg/L TDS. Typical bore yields within this aquifer range between approximately 0.5 to 3 L/sec, however, typically the yield is less than 1 L/sec. Groundwater uses within this aquifer include water for livestock, however, the water is not suitable for garden use.

6.2 Subsurface Conditions

The investigation of subsurface conditions conducted during the site contamination assessment for this project found that the subject site is overlain by fill material variously consisting of grey to brown silty clay or orange sand down to a maximum depth of 0.3 metres below existing ground level. In all cases the fill material layer was penetrated and was underlain by the anticipated grey residual basaltic clay. The

subsurface conditions encountered in each of the borehole/test pit logs are presented in Appendix I. The results of the field ranking based on visual and olfactory assessment conducted during the soil sampling program are also included in Appendix I.

6.3 Results of Chemical Analyses

The results of chemical analysis of individual soil samples in natural clay from the site contamination assessment stage indicated:

- concentrations of fluoride ranging from below the method detection limit of 100 mg/kg in TP 5 at a depth of 0.1 to 0.2 metres in fill material, up to 160 mg/kg in TP 3 at a depth of 0.15 to 0.25 metres in fill material;

- pH measurements ranging from of 8.5 pH units in TP 3 at a depth of 0.15 to 0.25 metres in fill material, up to 12.0 pH units in TP 5 at a depth of 0.1 to 0.2 metres in fill material;

- concentrations of sulphate ranging from below the method detection limit of 10 mg/kg in TP 3 at a depth of 0.15 to 0.25 metres in fill material, up to 50 mg/kg in BH 1 at a depth of 0.15 to 0.25 metres in fill material;

- total arsenic concentrations ranging from below the method detection limit of 2 mg/kg in a number of individual samples, up to 33 mg/kg in BH 2 at a depth of 0.1 to 0.2 metres in fill material;

- total cadmium concentrations ranging from below the method detection limit of 0.4 mg/kg in most individual samples, up to 1.2 mg/kg in TP 4 at a depth of 0.1 to 0.2 metres in fill material;

- total chromium concentrations ranging from 8.3 mg/kg in TP 5 at a depth of 0.1 to 0.2 metres in fill material, up to 33 mg/kg in TP 6 at a depth of 0.25 to 0.3 metres in fill material;

- total copper concentrations ranging from below the method detection limit of 5 mg/kg in a number of individual samples, up to 89 mg/kg in BH 2 at a depth of 0.1 to 0.2 metres in fill material;

- total lead concentrations ranging from below the method detection limit of 5 mg/kg in TP 5 at a depth of 0.1 to 0.2 metres, up to 540 mg/kg in TP 3 at a depth of 0.3 to 0.4 metres in natural soil;

- total nickel concentrations ranging from below the method detection limit of 5 mg/kg in a number of individual samples, up to 44 mg/kg in TP 4 at a depth of 0.1 to 0.2 metres in fill material;

- total zinc concentrations ranging from below the method detection limit of 5 mg/kg in TP 5 at a depth of 0.3 to 0.4 metres in natural soil, up to 150 mg/kg in TP 4 at a depth of 0.1 to 0.2 metres in fill material;

. concentrations of total recoverable hydrocarbons (TRH) C15 to C28 ranging from below the method detection limit of 50 mg/kg in most individual samples, up to 72 mg/kg in BH 2 at a depth of 0.1 to 0.2 metres in fill material;

. concentrations of total recoverable hydrocarbons (TRH) C29 to C36 ranging from below the method detection limit of 50 mg/kg in most individual samples, up to 100 mg/kg in TP 4 at a depth of 0.1 to 0.2 metres in fill material; and that,

. concentrations of all other contaminants measured in individual samples were below the respective method detection limits.

7.0 DISCUSSION OF RESULTS

The guidelines for performance of a site contamination assessment which apply in Australia are those published in the "National Environment Protection (Assessment of Site Contamination) Measure 1999, plus the "Guidelines for the Assessment and Management of Contaminated Sites" (January 1992), Australian and New Zealand Environment Council, and the National Health and Medical Research Council (NH&MRC) known as the ANZECC guidelines.

In performing the site contamination assessment work for this project, Diomides & Associates Pty Ltd has had regard to the State Environment Protection Policy (Prevention and Management of Contaminated Land) and various guidelines including the National Environment Protection Measure (NEPM), the ANZECC guidelines, the Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and

Statements of Environmental Audit, and the Australian Standard - Guide to the sampling and investigation of potentially contaminated soil, AS 4482.1 - 2005 and AS 4482.2 - 1999. The results of the chemical analyses have been compared with the soil investigation levels adopted under the NEPM guidelines.

In accordance with Table 1 - Protected Beneficial Uses of Land as referred to in the State Environment Protection Policy – Prevention and Management of Contaminated Land, the Beneficial Uses to be protected for a higher density residential land use scenario include:

(i) Maintenance of Highly Modified Ecosystems – Contamination must not adversely affect the maintenance of relevant ecosystems and the level of any indicator should not exceed NEPM EIL criteria or levels derived using NEPM risk assessment methodology. However, in this case maintenance of highly modified ecosystems has limited relevance given that the entire are of the site will be sealed under the concrete floor slab of the building;

(ii) Human Health – Contamination must not cause an adverse effect on human health and the levels of any indicator must not exceed relevant NEPM HIL criteria or levels derived using NEPM risk assessment methodology. In this case human health is relevant given that persons may be exposed to uncovered soil (although very limited for proposed use). Workers engaged in excavations for construction or maintenance purposes may also be exposed to the soil. Volatile organic vapours can also migrate through structures, potentially exposing occupants to these substances;

(iii) Buildings & structures – has relevance given that soils should not attack, degrade or corrode building materials such as buried unprotected steel or concrete and relate to levels of sulphates, chlorides, and pH in soil which would not be expected to adversely affect buildings and structures;

(vi) Aesthetics – Has relevance given that the soil should not be offensive to the senses of human beings (e.g. visually offensive or odorous). The aesthetic issues may include discoloured or malodorous soils, soils with unusual consistency or soils containing waste; and,

(v) Production of food, flora and fibre – Contamination of land must not adversely affect produce quality or yield and affect the level of any indicator in food, flora and fibre produced at the site and the level of any indicator should not exceed the Australia New Zealand Food Authority, Food Standards. However, in this case production of food, flora and fibre has limited or no relevance given that the entire are of the site will be sealed under the concrete floor slab of the building.

In accordance with the NEPM guidelines, Diomides & Associates has adopted the Ecological Investigation Levels (EILs) for an urban setting, the Health Investigation Level A (HIL A) which apply for 'standard' residential use with garden/accessible soil, Health Investigation Level D (HIL D) which applies for residential use with minimal opportunities for soil access, Health Investigation Level F (HIL F) which applies for commercial/industrial use including premises such as shops and offices as well as factories and industrial sites, plus the NSW EPA Guidelines for Assessing Service Station Sites for petroleum hydrocarbon levels in soil. The results of all chemical analyses conducted during this investigation have been compared with these criteria.

Industrial Waste Resource Guidelines, Publication IWRG621 titled "Soil Hazard Categorisation and Management", covers Fill Material upper limits and provides a Table 2 titled, "Soil hazard categorisation thresholds". The Industrial Waste Resource Guidelines states, "Contaminated soils with any contaminant level above the TC2 or ASLP2 thresholds are categorised as Category A. Contaminated soils with any contaminant level greater than TC1, but below TC2, or greater than ASLP1, but below ASLP2 are categorised as Category B. Soils with any contaminant level greater than TC0, but below the TC1 and ASLP1 thresholds are categorised as Category C. Soils with all contaminant levels below the TC0 threshold are categorised as clean fill." The results of chemical analyses conducted during this investigation have also been compared with these criteria.

MGT-Labmark carried out internal quality assurance procedures involving the analysis of spike and duplicate soil samples. For this investigation, MGT-Labmark reported internal duplicate relative percent difference (RPD) values between <1 % and 93 % with approximately 98.0 percent of duplicate RPD values within the +/- 50 % acceptance criteria. Percentage spike recovery values ranged from 70 % to 130 % with one hundred percent of percentage spike recovery values within the 70 to 130 % acceptance criteria. All method blank and laboratory control samples (LCS) reported by MGT-Labmark are within the required acceptable limits as required by their NATA accreditation. Laboratory results for all soil samples are attached as Appendix L.

Envirolab also carried out internal quality assurance procedures involving the analysis of spike and duplicate soil samples. For this investigation, Envirolab reported internal duplicate relative percent difference (RPD) values between 0 % and 33 % with one

hundred percent of duplicate RPD values within the +/- 50 % acceptance criteria. Percentage spike recovery values ranged from 74 % to 109 % with one hundred percent of percentage spike recovery values within the 70 to 130 % acceptance criteria. Laboratory results for all soil samples are attached as Appendix L.

The summary tables presented in Appendix K provide an evaluation of laboratory analysis results for quality control samples. The RPDs listed in Appendix K have been calculated in accordance with Australian Standards AS 4482.1 – 2005: Guide to the sampling and investigation of potentially contaminated soil. All RPDs have been compared with the acceptance criteria set out in Australian Standard AS 4482.1 – 2005, which states that typical RPD values for quality control samples should be between 30 to 50 per cent of the mean concentration of analyte.

The RPDs presented in Appendix K for the blind replicate soil samples (BH 2, 0.3 – 0.4 m vs BLIND) range from 0 per cent in a number of cases, up to 86.4 per cent in the case of copper. Approximately 97.7 % of the blind replicate RPD calculations for the soil samples comply with the criteria for quality control samples. The RPDs for the split soil samples (BH 2, 0.3 – 0.4 m vs SPLIT) range from zero or effectively zero per cent in a number of cases, up to 94.7 per cent in the case of copper. Approximately 97.3 % of the split soil RPD calculations comply with the criteria for quality control samples.

The elevated RPDs mentioned were not considered significant in this case because the parameters generally have been detected in low concentrations, in some cases, within a non-homogeneous soil which can explain the elevated RPDs. Different laboratory methods may also account for some elevated RPDs, especially in cases

where half the laboratories detection limit has been used. It must also be noted that MGT-Labmark and Envirolab use different method detection limits in many cases. Consideration was also given to the magnitude of each analysis result in comparison with the adopted criteria when determining the significance of any elevated RPDs. After considering these factors, the relevant laboratories were not requested to investigate any elevated RPDs.

RPDs were not calculated in cases where the results for the primary and secondary results were both below the method detection limits. This would result in a RPD of zero or would be an unrepresentative RPD due to different detection limits used by the two different laboratories.

An evaluation of laboratory analysis results for quality control samples included the evaluation of a rinsate sample and field blank sample. The results for the rinsate sample indicated that cleaning procedures were effective with metals detected at levels below the laboratory detection limits. The results for the field blank sample indicated that cross contamination was not evident during field work and transportation to the laboratories with volatiles detected at levels below the laboratory detection limits. The results for the rinsate and field blank samples have been summarised in Appendix K with laboratory results attached in Appendix L. A table summarising the quality control/quality assurance results has been presented below in Table 4:

TABLE 4. Summary of Quality Control/Quality Assurance Results

QA/QC Objective	Achievement of Objective
Precision/accuracy for field sampling and internal laboratory analysis	Approximately 98.6 % of quality control samples are within acceptance criteria. Internal method blanks and laboratory control samples are within required acceptable limits. Rinsate and Field Blank samples within acceptable limits.
Document completeness	Chain of custody documentation and borehole/test pit logs all completed in an acceptable manner.
Data comparability	NATA certified laboratories used and consistent sampling technique used according to industry practice.
Sample holding times	All samples analysed within required sample holding times.
Data representivity	Sampling conducted on a systematic basis across the site.

The summary table presented above (Table 4) indicates that most quality assurance and quality control objectives have been achieved within acceptable industry guidelines and can be relied upon for interpretive use for the purpose of this site contamination assessment.

Contaminant occurrences are also presented in Appendix K which show any elevated concentration in shaded format, indicating that a particular contaminant is above one or more of the adopted criteria.

Analysis of the data collected during this investigation indicates that:

- Fill material identified by individual samples BH 1 at a depth of 0.15 to 0.25 metres and TP 5 at a depth of 0.1 to 0.2 metres exhibited elevated pH levels above EPA Clean Fill criteria. It is considered that this soil will not pose a significant health risk to future residents or ecological receptors given that the subject site will be sealed under concrete slabs or paving. However, should this soil be removed off site, it will not meet EPA requirements for disposal as clean fill and will be classified prescribed waste - Category C contaminated soil;

- Fill material identified by individual sample BH 2 at a depth of 0.1 to 0.2 metres exhibited elevated concentrations of arsenic above NEPM EIL and EPA Clean Fill criteria. It is considered that this soil will not pose a significant health risk to future residents or ecological receptors given that the subject site will be sealed under concrete slabs or paving. However, should this soil be removed off site, it will not meet EPA requirements for disposal as clean fill and will be classified prescribed waste - Category C contaminated soil;

- Natural soil identified by individual samples TP 3 at a depth of 0.3 to 0.4 metres exhibited elevated concentrations of lead above NEPM HIL A and EPA Clean Fill criteria. It is considered that this soil will not pose a significant health risk to

future residents or ecological receptors given that the subject site will be sealed under concrete slabs or paving. However, should this soil be removed off site, it will not meet EPA requirements for disposal as clean fill and will be classified prescribed waste - Category C contaminated soil; and that,

- All other soil samples recovered during these field investigations were either below method detection limits or complied with the adopted criteria.

8.0 CONCLUSIONS AND RECOMMENDATIONS

In accordance with the agreed scope of work for this site contamination assessment, the presence and extent of any contaminants have been reported and compared with applicable site contamination guidelines. Analysis of the data collected during this project indicates that soil contamination within the boundaries of the subject site would not present any significant risk to any future users of the subject site or to the environment provided that all fill material present on-site is sealed under the concrete floor slab of the proposed higher density residential development. However, fill material from some areas of the site will not meet EPA requirements for off-site disposal as clean fill and may be classified as prescribed waste – Category C contaminated soil.

It is considered that the implications of this site contamination assessment with respect to future development of the subject site for a higher density residential use include the following:

- negligible or no risks to health and safety of workmen due to soil contamination during any construction work on site or during repair or replacement of underground services;

- negligible, or no adverse effects to health and safety of potential future residents and visitors, and especially young children, if the site is to be used for higher density residential purposes; and,

- negligible or no adverse effects on the surrounding environment due to any leaching of contaminants present in soil, into road side drains or groundwater.

However, aside from reporting the presence of any contaminants found, carrying out a comparison of the data collected with appropriate contamination guidelines, and carrying out a qualitative risk assessment, the task of conducting any quantitative risk assessment for the contaminant concentrations encountered is outside the scope of work for this project.

Diomides & Associates advise that no significant soil contamination was encountered within the boundaries of the subject site that would pose a health risk to future higher density residential users or ecological receptors provided that all fill material on site is sealed beneath the concrete floor slabs of the proposed higher density residential development.

We must advise in this regard that before the subject site can be used for residential purposes or other similar sensitive use, a Certificate or Statement of Environmental Audit must be obtained in accordance with Part IXD of the Environment Protection Act 1970 of Victoria.

9.0 LIMITATIONS OF THIS REPORT

Soil and rock formations are variable. The soil logs indicate what are considered to be the prevailing subsurface conditions within the site. Boundaries between zones on the logs are often not distinct, but rather are transitional and have been interpreted. The precision with which subsurface conditions are indicated depends largely on the frequency and method of sampling, and the uniformity of subsurface conditions.

A site contamination assessment necessarily involves the investigation of subsurface conditions at a site for a limited number of locations and the interpretation of data collected from a specified range of analyses, and a limited number of soil samples recovered from those locations. Chemical conditions described in this report refer only to those conditions indicated by analysis of soil samples obtained at the points and under the circumstances noted in the report and are relevant only to the conditions which pertained at the time of this investigation. These conditions may vary due to the variability of contaminant concentrations in soil as a consequence of activities on the site or adjacent sites.

Should there be revealed at some future time that contaminant concentrations in soil encountered at the site differ significantly from those indicated by the results in this report, either due to natural variability of sub surface conditions or above ground activities, it is strongly recommended that Diomides & Associates Pty Ltd be notified of the differences and provided with an opportunity to assess the significance of such differences and to provide appropriate advice.

Due care and skill have been applied in carrying out and reporting on this work. The findings, conclusions and comments contained in this report represent professional estimates and opinions and are not to be read as facts unless the context makes it clear to the contrary. In general, statements of fact are confined to statements as to what was done and/or what was observed. Other statements have been based on professional judgement.

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DIOMIDES & ASSOCIATES PTY LTD

DR COSTA DIOMIDES
Senior Environmental Scientist

STEPHEN DIOMIDES
Director
Lead Environmental Auditor – Site Contamination
Certificate No. 14079
RABQSA Register of Certified Auditors

10.0 REFERENCES

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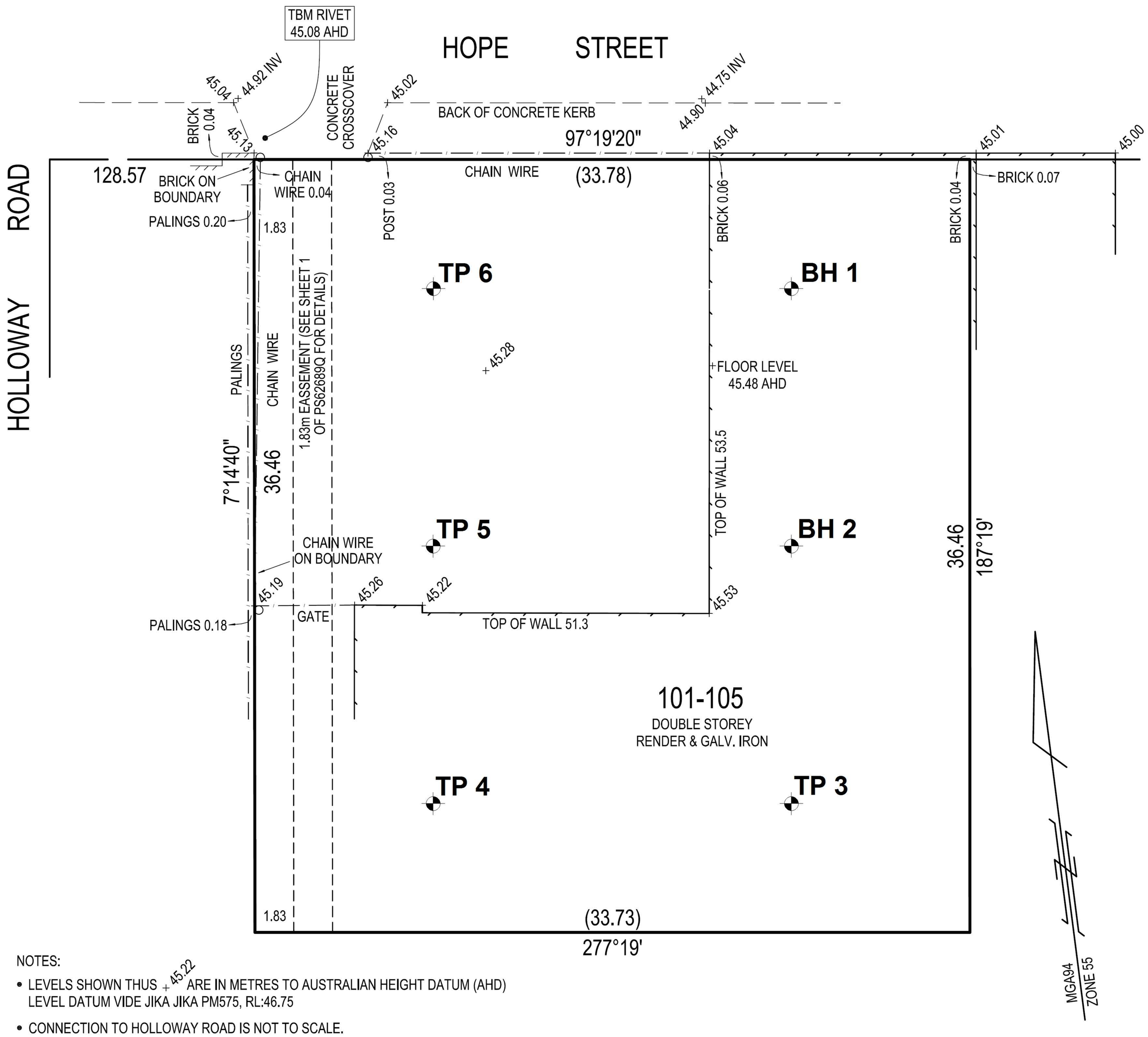


NOTES:

- LEVELS SHOWN THUS +45.22 ARE IN METRES TO AUSTRALIAN HEIGHT DATUM (AHD) LEVEL DATUM VIDE JIKA JIKA PM575, RL:46.75
- CONNECTION TO HOLLOWAY ROAD IS NOT TO SCALE.
- PLOTTED LOCATIONS OF FENCING AND BUILDINGS (NEAR BOUNDARIES) ON THIS PLAN ARE APPROXIMATE ONLY. REFER TO OFFSET DISTANCES FROM TITLE BOUNDARY FOR ACTUAL POSITION.
- THIS SURVEY HAS RE-ESTABLISHED LOT BOUNDARIES, WHICH ARE SHOWN ON THIS PLAN IN RELATION TO EXISTING FENCES AND / OR BUILDING WALLS THAT DEFINE THE EXTENT OF THE LAND OCCUPIED BY THE SUBJECT PROPERTY
- THE APPLICABLE FLOOD LEVEL FOR THIS SITE IS 45.40 METRES TO THE AUSTRALIAN HEIGHT DATUM.

SCALE
2 0 2 4 6 8
LENGTHS ARE IN METRES

FIGURE 2 - SITE PLAN

Terrain Consulting Group
12 Parkhill Road Kew 3101 Ph: 03 9853 3352 Fax: 03 9853 8907
P.O. Box 3018 Cotham VIC 3101 Email: admin@terrainconsulting.com.au

CERTIFICATION BY SURVEYOR

I, Stephen John McCarthy of Terrain Consulting Group Pty. Ltd a surveyor licensed under the Surveying Act 2004, certify that this plan correctly represents the information obtained by me from such sources as indicated hereon.

Dated this 4th day of February 2011

.....Signature

TITLE PARTICULARS:	*SCALE:* 1:200	*PLAN:* **TITLE RE-ESTABLISHMENT, FEATURE AND LEVEL SURVEY**	*SHEET 1 OF 1*
LOT 1 on PS626893Q (NOT REGISTERED)	*ORIGINAL SHEET:* A3		*DRAWING No.*
	DATE OF SURVEY: 24-01-2011	*ADDRESS:* **101-105 HOPE STREET, BRUNSWICK**	**10385D01s**
AREA OF TITLE: 1231m²	*DRAWN:* G. PARKER	*MUNICIPALITY:* **MORELAND**	*VERSION No: 1*
	SOURCE OF DATA: LAND REGISTRY	*PROJECT:* **PROPOSED DEVELOPMENT**	*REVISION DATE:*

APPENDIX A

LAND VICTORIA PROPERTY REPORT &

CERTIFICATE OF TITLE DOCUMENTS

Property Report from www.land.vic.gov.au on 27 June 2012 10:02 AM

Address: 101-105 HOPE STREET BRUNSWICK 3056
Lot / Plan: Lot 2 LP89346
SPI (Standard Parcel Identifier): 2\LP89346
Local Government (Council): MORELAND **Council Property Number:** 81069
Directory Reference: Melway 29 F6

This property is not in a designated bushfire prone area.
No special bushfire construction requirements apply.
Further information about the building control system and building in bushfire prone areas can be found on the Building Commission website www.buildingcommission.com.au

Parcel Details

Lot/Plan or Crown Description	SPI
Lot 2 LP89346	2\LP89346

State Electorates

Legislative Council: NORTHERN METROPOLITAN (2005)
Legislative Assembly: BRUNSWICK (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: CITIPOWER (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zones:	INDUSTRIAL 3 ZONE (IN3Z)
	SCHEDULE TO THE INDUSTRIAL 3 ZONE
	MIXED USE ZONE (MUZ)
	SCHEDULE TO THE MIXED USE ZONE
Planning Overlays:	ENVIRONMENTAL AUDIT OVERLAY (EAO)
	SPECIAL BUILDING OVERLAY (SBO)
	SPECIAL BUILDING OVERLAY SCHEDULE (SBO)

Further Planning Information

Planning scheme data last updated on 21 June 2012.

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, local, particular and general provisions of the local planning scheme that may affect the use of the land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & 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

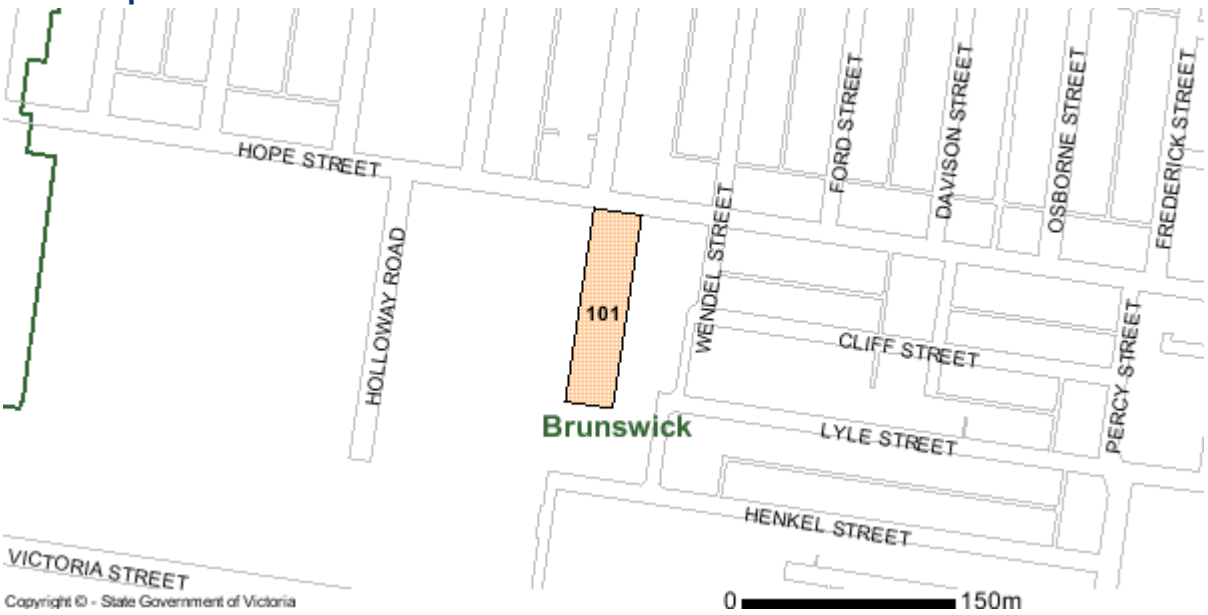
For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

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

---

Area Map



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Espreon Online Information System

Register Search Statement

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

VOLUME 08874 FOLIO 438 Security no : 124039891635F
Produced 17/11/2011 11:18 am

LAND DESCRIPTION

Lot 2 on Plan of Subdivision 089346.
PARENT TITLE Volume 08719 Folio 266
Created by instrument D944669 26/01/1971

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RODEN STREET PTY LTD of 7 YORK PLACE CARLTON VIC 3053
AG871759A 17/11/2009

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AG871761P 17/11/2009
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 or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP089346 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: 101-105 HOPE STREET BRUNSWICK VIC 3056

DOCUMENT END
[Register Search Statement] # 12320484 - 12320484111823 '10-1003'

SUPPLIED UNDER LICENCE BY SAI GLOBAL PROPERTY DIVISION PTY LTD.

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HISTORICAL SEARCH STATEMENT Land Victoria

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Volume 08874 Folio 438
Folio Creation: Created as paper folio continued as computer folio
Parent title Volume 08719 Folio 266

STATEMENT END

Delivered by LANDATA®. Land Victoria timestamp 27/04/2009 15:05 Page 1 of 2

480206

ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

VICTORIA

REGISTER BOOK

VOL. 8874 FOL. 438

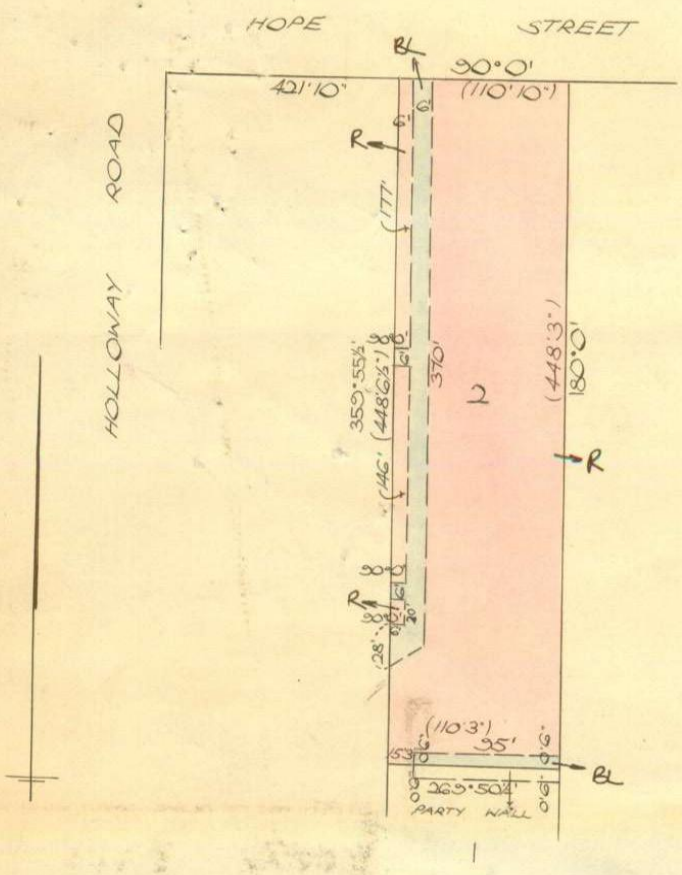
Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

VOL. 8874 FOL. 438

RELJAK INVESTMENTS PROPRIETARY LIMITED of 1-9 Palmerston Crescent - - South Melbourne is now the proprietor of an estate in fee simple - - subject to the encumbrances notified hereunder in ALL THAT piece of -- land delineated and coloured red and blue on the map in the margin - - being Lot 2 on Plan of Subdivision No.89346 Parish of Jika Jika - - - County of Bourke -

DATED the 26th day of January 1971



MEASUREMENTS ARE IN FEET AND INCHES.

V W Howden

Assistant Registrar of Titles

OFFICE OF TITLES VICTORIA

ENCUMBRANCES REFERRED TO

MORTGAGES A12604 A472660 - and B917354 - - - - - - - - - - -

As to the land coloured blue --

THE EASEMENTS (if any) existing over the same by virtue of - -- Section 98 of the Transfer of - Land Act - - - - - - - - - - - - -

THE ABOVE MORTGAGES ARE DISCHARGED 28 JUN 1972

OFFICE OF TITLES C.H.S. VICTORIA

Derived from Vol.8719 Fol.266
D944669

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MORTGAGE to MARBUT PROPRIETARY LIMITED
Registered 2nd February 1971
No. D949065

DISCHARGED 28 JUN 1972

OFFICE OF TITLES G.H.S. VICTORIA

OFFICE OF TITLES R. L. VICTORIA

GATIC (AUSTRALIA) PROPRIETARY LIMITED of 11 Holloway Road Brunswick is now the proprietor.
Registered 28th June 1972
No.E437950

OFFICE OF TITLES C.H.S. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 28th June 1972
No.E437951

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES C.H.S. VICTORIA

MORTGAGE to RELJAK INVESTMENTS PROPRIETARY LIMITED
Registered 7th July 1972
No.E449432

DISCHARGED

OFFICE OF TITLES G.P.M. VICTORIA

OFFICE OF TITLES W.M.S. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 19th October 1977
No.G831586

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES W.M. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 4th March 1980
No.H891404

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES F.W.M. VICTORIA

MORTGAGE to AUSTRALIAN MUTUAL PROVIDENT SOCIETY
Registered 27th October 1982
No.K138161

Discharged as to part being the within mortgage 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES A.S. VICTORIA

MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED
Registered 13 JAN 1993
No. S308026G

DISCHARGED 26 OCT 1995

OFFICE OF TITLES D.M.L. VICTORIA

OFFICE OF TITLES S.R. VICTORIA

CAVEAT

CAVEATOR: BOMO INVESTMENTS PTY. LTD.
CAPACITY: MORTGAGEE
DATE OF CLAIM DOCUMENT: 30/1/95
LODGED BY: ELWYN DELVES
NOTICE TO: 1ST FLOOR 369 BRIDGE RD. RICHMOND 3121
NO.: T567858C
DATE: 22/2/95

OFFICE OF TITLES P.M.C. VICTORIA

CAVEAT WITHDRAWN
As to the within land
26/10/95

OFFICE OF TITLES J.E.O. VICTORIA

PROPRIETOR
BRANIC PTY. LTD.
102 HENKEL ST. BRUNSWICK 3056

T929663H/64E 26/10/95

OFFICE OF TITLES D.M.L. VICTORIA

T08874-438-1-1

MORTGAGE
WESTPAC BANKING CORPORATION

T929665B 26/10/95

OFFICE OF TITLES D.M.L. VICTORIA

CAVEAT NO. U156665T LODGED 21-12-95

CAVEAT WITHDRAWN
30 JAN 1996

OFFICE OF TITLES P.F. VICTORIA

V.8874 F.438

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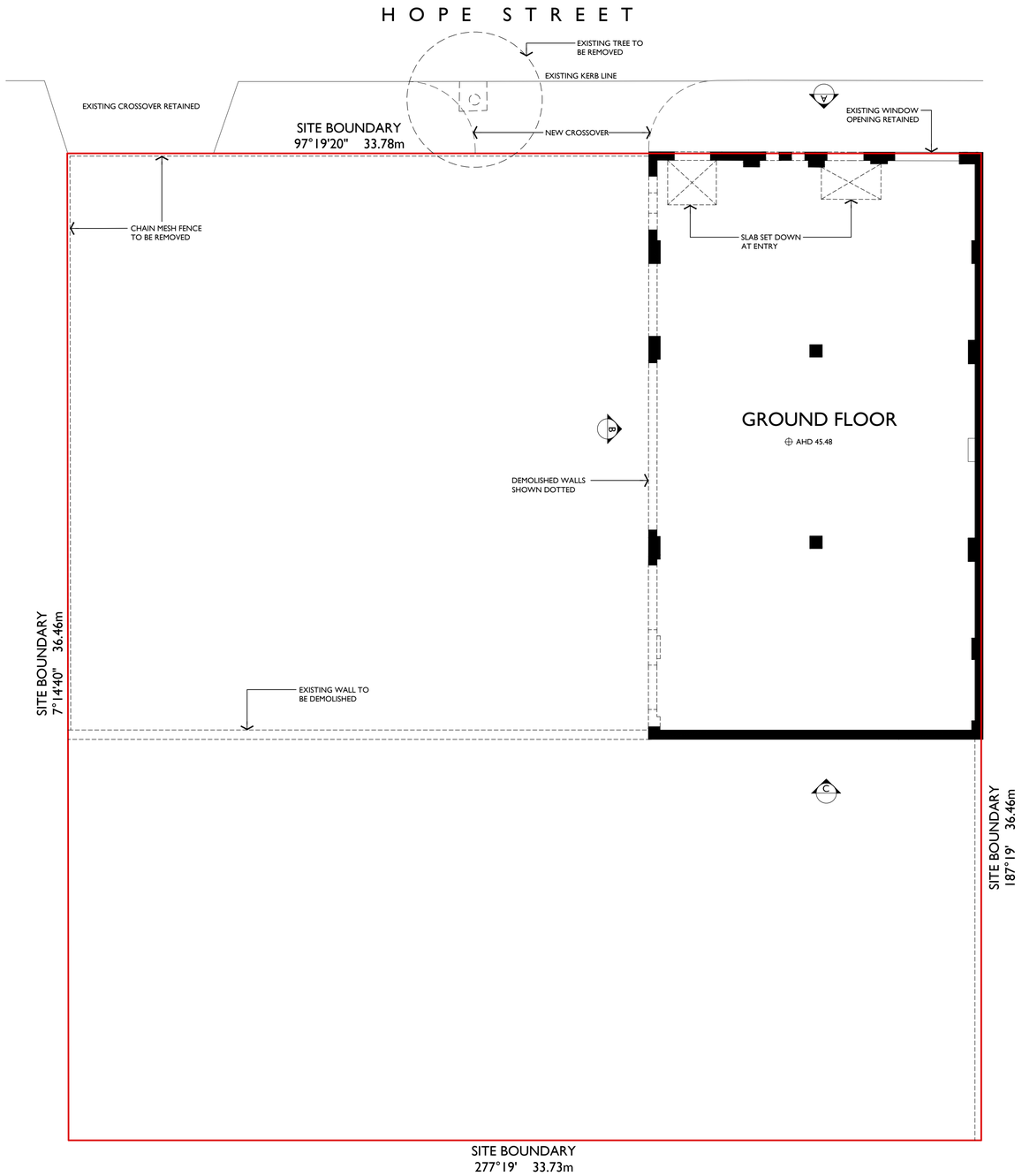
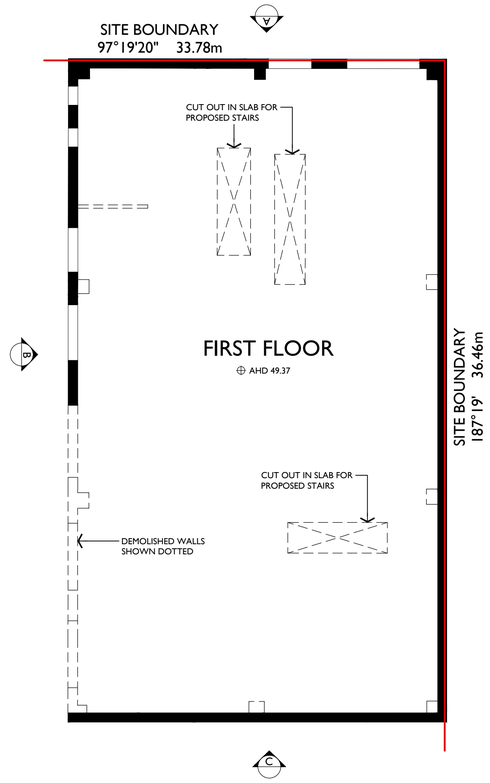
APPENDIX B

DEVELOPMENT PLANS



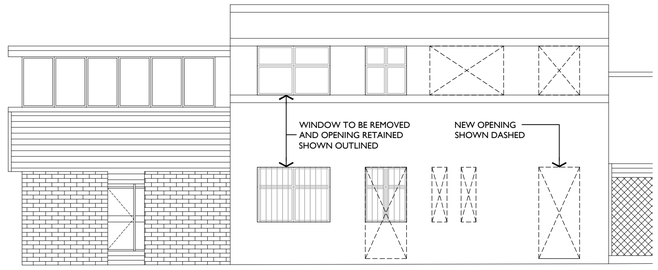


NOTES:

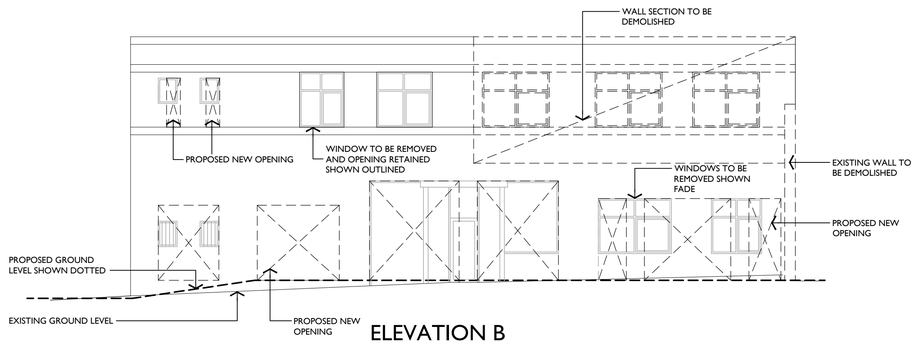
REMOVE ALL WINDOWS FROM EXISTING OPENINGS.

ALL INTERNAL WALLS, STAIRS, FIXTURES & FITTINGS TO BE DEMOLISHED.

STRUCTURAL COLUMNS & BEAMS SUPPORTING UPPER FLOOR SLAB TO BE RETAINED.



ELEVATION A



ELEVATION B

MICELI OLDFIELD SINTON ARCHITECTS
3 York Place, Carlton Victoria 3053
T 03 9347 2488 F 03 9347 2411
info@mosarchitects.com.au
www.mosarchitects.com.au

101-105 Hope St Brunswick

Roden Street Pty Ltd

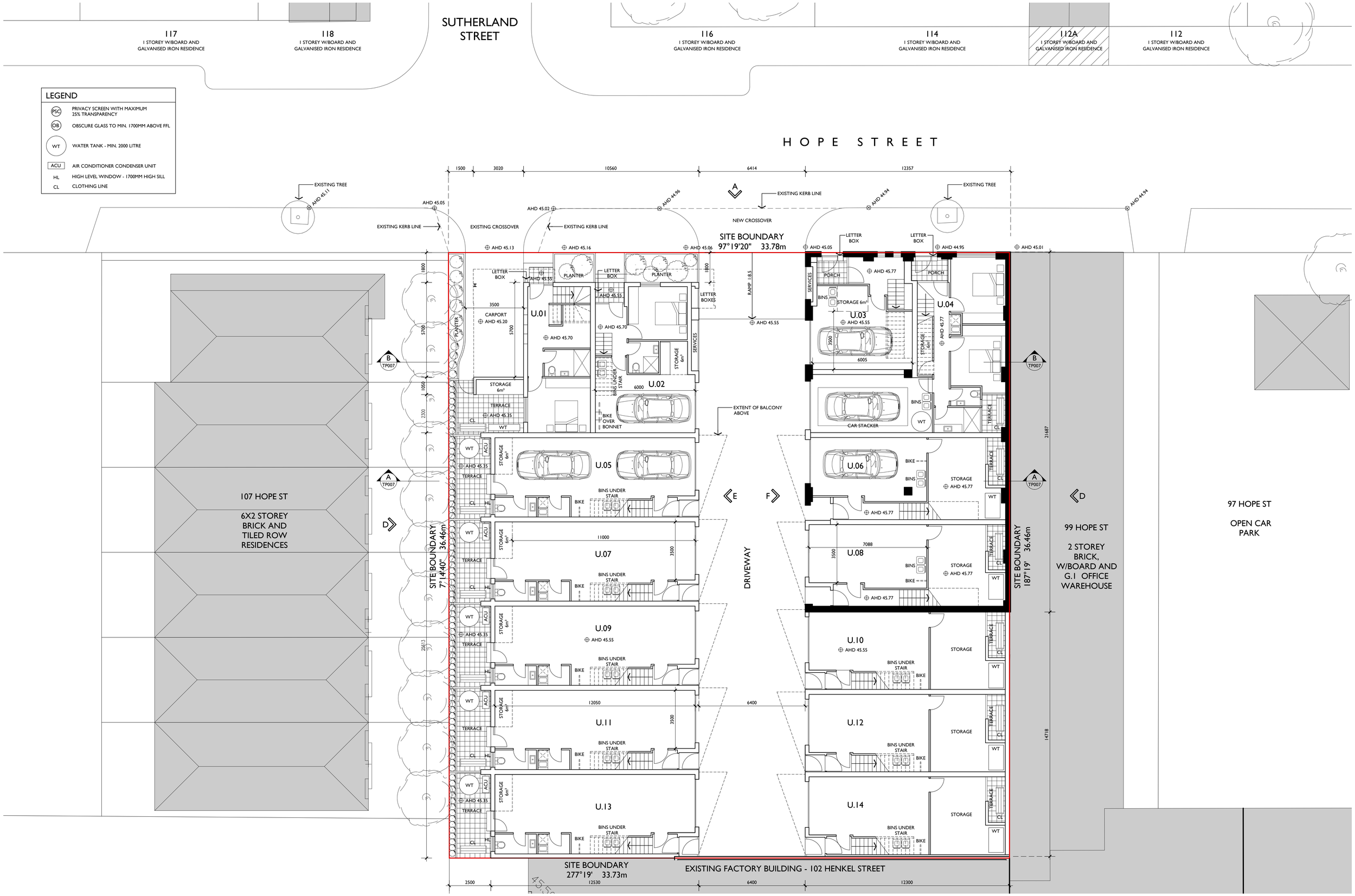
0 1 2 3 4 5m

Scale: 1:100 @ A1

07.03.12 Issued for Town Planning Application

Job no: 11-1202 FEB 2012 TP001

Demolition Plan & Elevation



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101-105 Hope St Brunswick

Roden Street Pty Ltd

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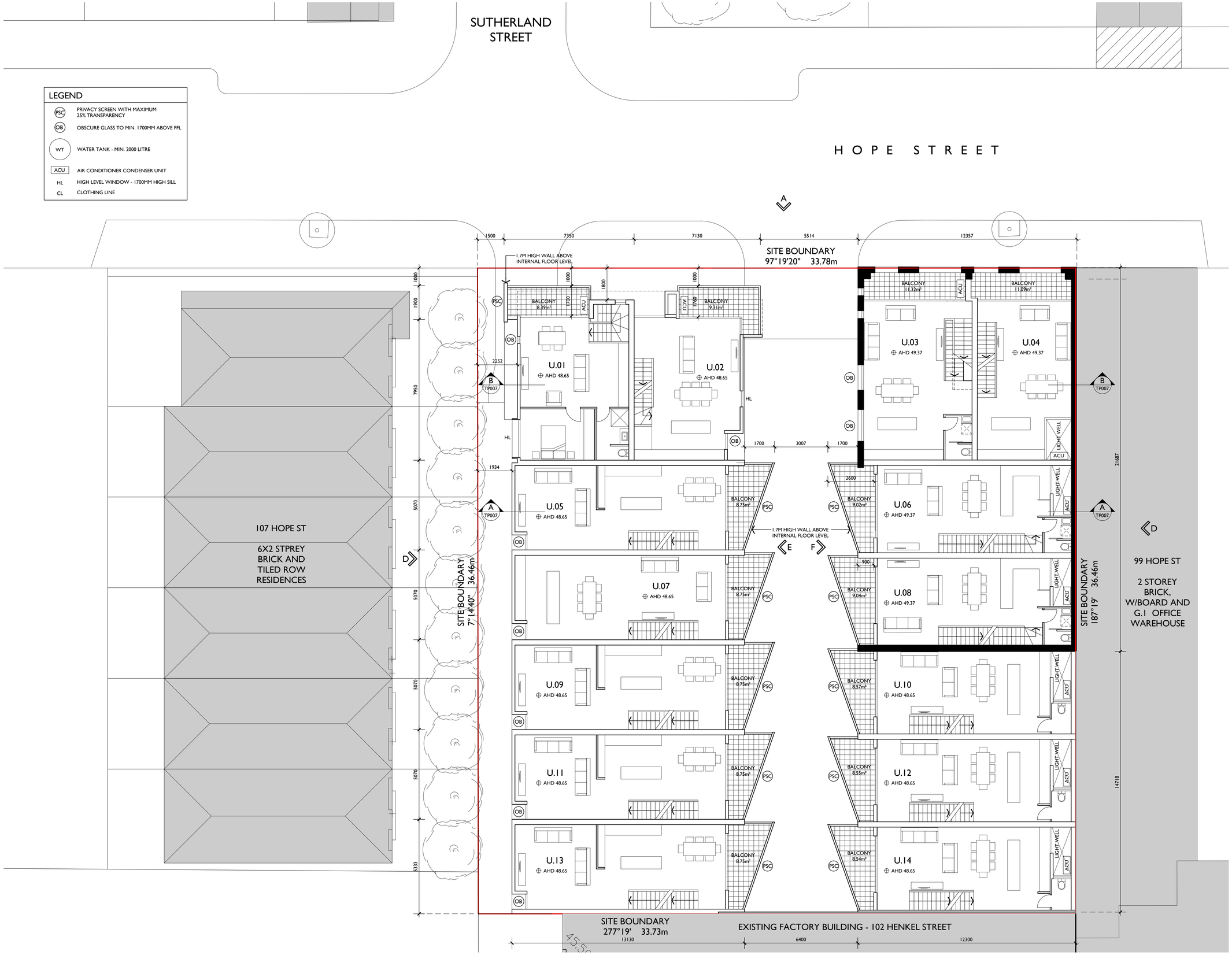
07.03.12 Issued for Town Planning Application

Job no: 11-1202 FEB 2012 TP002

Proposed Ground Floor Plan



LEGEND

PSC	PRIVACY SCREEN WITH MAXIMUM 25% TRANSPARENCY
OB	OBSCURE GLASS TO MIN. 1700MM ABOVE FFL
WT	WATER TANK - MIN. 2000 LITRE
ACU	AIR CONDITIONER CONDENSER UNIT
HL	HIGH LEVEL WINDOW - 1700MM HIGH SILL
CL	CLOTHING LINE

DEVELOPMENT SUMMARY

SITE AREA :	1230m²
PROPOSED BUILDING FOOTPRINT :	952m²
PROPOSED SITE COVERAGE :	78%
PROPOSED SITE PERMEABILITY :	0%

ALL LEVELS TO AHD. REFER TO SURVEY BY TERRAIN CONSULTING GROUP, DRAWING REFERENCE : 10385D01s

FLOOD LEVEL : AHD 45.40
MELBOURNE WATER REFERENCE: 167934

TOTAL UNITS : 14 TOWNHOUSES

UNIT 2-14 : 3 LEVELS - 2 BEDS AND ASSOCIATED GARAGE
UNIT 1 : 2 LEVELS - 2 BED AND ASSOCIATED CARPORT
UNIT 4 : 3 LEVELS - 3 BED AND ASSOCIATED GARAGE WITH CAR STACKER

CAR PARKING : 19 CAR SPACES (GARAGES/CARPORTS)

AREA SCHEDULE

UNIT NO.	GARAGE + ASSOCIATED UTILITIES	LIVING AREA	PRIVATE OPEN SPACE
UNIT 1	-	123.51m²	21.0m²
UNIT 2	29.24m²	104.47m²	8.5m²
UNIT 3	30.14m²	119.83m²	11.3m²
UNIT 4	28.22m²	136.29m²	15.3m²
UNIT 5	61.61m²	113.07m²	21.6m²
UNIT 6	57.68m²	81.84m²	13.1m²
UNIT 7	61.61m²	113.02m²	21.5m²
UNIT 8	58.90m²	117.27m²	12.9m²
UNIT 9	61.61m²	113.07m²	21.5m²
UNIT 10	56.19m²	111.24m²	12.3m²
UNIT 11	61.61m²	113.07m²	21.5m²
UNIT 12	55.92m²	110.71m²	12.2m²
UNIT 13	62.86m²	115.36m²	21.7m²
UNIT 14	55.80m²	111.46m²	12.2m²

NOTES

1. U.04 GARAGE CONTAIN KLAUS VARIOPARKER 2015 DEPENDENT STACKERS
2. PRIVATE OPEN SPACES INCLUDES TERRACES AND BALCONIES

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info@mosarchitects.com.au
www.mosarchitects.com.au

101-105 Hope St Brunswick

Roden Street Pty Ltd

0 1 2 3 4 5m
Scale: 1:100 @ A1

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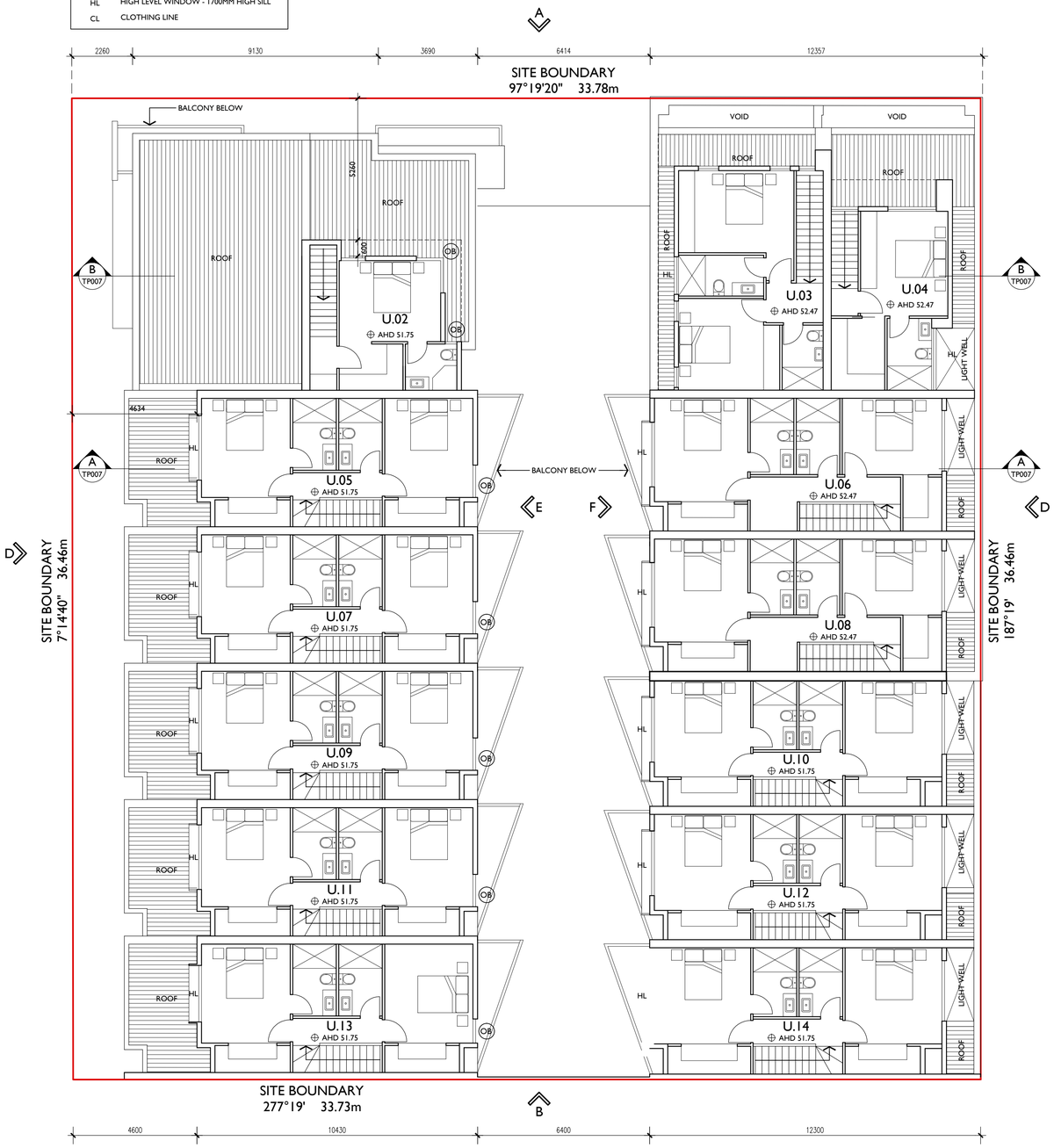
Job no: 11-1202 FEB 2012 TP003

Proposed First Floor Plan

LEGEND

PSC	PRIVACY SCREEN WITH MAXIMUM 25% TRANSPARENCY
OB	OBSCURE GLASS TO MIN. 1700MM ABOVE FFL
WT	WATER TANK - MIN. 2000 LITRE
ACU	AIR CONDENSER UNIT
HL	HIGH LEVEL WINDOW - 1700MM HIGH SILL
CL	CLOTHING LINE



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101-105 Hope St Brunswick

Roden Street Pty Ltd

0 1 2 3 4 5m

Scale: 1:100 @ A1

07.03.12 Issued for Town Planning Application

Job no: 11-1202 FEB 2012 TP004

Proposed Second Floor & Roof Plan

APPENDIX C

NEARBY ENVIRONMENTAL AUDITS

Appendix C1. Certificates and Statements of Environmental Audit for Nearby Sites

(Note: CARMs File Numbers in red are not available for review)

Issue	CARMs No.	Locality	Address	Date Completes	Easting	Northing	Difference East (m)	Difference North (m)	Radius from Site (m)	Direction from Site
CERTIFICATE	34343-1	BRUNSWICK	107-109 HOPE Street	3/02/1998	319816	5818454	-29	-1	29	S-W
STATEMENT	67519-1	BRUNSWICK	95 HOPE Street	28/06/2010	319889	5818444	44	-11	45	S-E
STATEMENT	29989-1	BRUNSWICK	5 HOLLOWAY Road	31/10/1996	319709	5818440	-136	-15	137	S-W
STATEMENT	31185-1	BRUNSWICK WEST	9-13 HOLLOWAY Road	14/04/1997	319705	5818404	-140	-51	149	S-W
CERTIFICATE	42202-1	BRUNSWICK	64 HOPE Street	20/12/2001	320108	5818456	263	1	263	N-E
STATEMENT	49972-1	BRUNSWICK	452-462 VICTORIA Street	22/06/2004	319668	5818151	-177	-304	352	S-W
STATEMENT	52306-1	BRUNSWICK	FORMER BRUNSWICK GASWORKS SITE 21-35 HOPE Street	13/04/2006	320298	5818396	453	-59	457	S-E
STATEMENT	52306-2	BRUNSWICK	FORMER BRUNSWICK GASWORKS SITE 21-35 HOPE Street	15/11/2005	320298	5818396	453	-59	457	S-E
STATEMENT	52657-1	BRUNSWICK	348 ALBION Street	18/07/2003	319529	5818888	-316	433	536	N-W
STATEMENT	69266-1	BRUNSWICK	7 WEST Street	15/09/2011	320375	5818562	530	107	541	N-E
STATEMENT	69801-1	BRUNSWICK	7-9 FLORENCE Street	23/03/2012	320373	5818658	528	203	566	N-E
STATEMENT	48416-1	BRUNSWICK WEST	34 NEWMAN Street	7/02/2003	319353	5818753	-492	298	575	N-W
STATEMENT	59255-1	BRUNSWICK	11-13 MERRIFIELD Street	13/02/2006	320343	5818146	498	-309	586	S-E
STATEMENT	56871-1	BRUNSWICK	21 BALLARAT Street	21/02/2005	320380	5818184	535	-271	600	S-E
STATEMENT	69181-1	BRUNSWICK	10-14 HOPE Street	15/08/2011	320445	5818417	600	-38	601	S-E
CERTIFICATE	63250-1	BRUNSWICK	10-12 BREESE Street	11/03/2008	320452	5818478	607	23	607	N-E
STATEMENT	38089-2	BRUNSWICK	64-72 TINNING Street	19/11/1999	320163	5818973	318	518	608	N-E
STATEMENT	38089-1	BRUNSWICK	64-72 TINNING STREET	17/09/1999	320163	5818973	318	518	608	N-E
STATEMENT	47152-1	BRUNSWICK	19 BALLARAT Street	25/10/2002	320390	5818183	545	-272	609	S-E
STATEMENT	61671-1	BRUNSWICK	597-605 SYDNEY Road	2/12/2008	320456	5818525	611	70	615	N-E
STATEMENT	69267-1	BRUNSWICK	4 FLORENCE Street	21/10/2011	320406	5818710	561	255	616	N-E
STATEMENT	33805-1	BRUNSWICK	PART OF FORMER BRUNSWICK MARKET BUILDING 1-9 BALLARAT Street	19/12/1997	320433	5818181	588	-274	649	S-E
STATEMENT	67364-1	BRUNSWICK	210 ALBION Street	15/10/2010	320442	5818765	597	310	673	N-E
STATEMENT	64442-1	BRUNSWICK WEST	399-401 ALBION Street	14/05/2009	319371	5818940	-474	485	678	N-W
CERTIFICATE	40502-1	BRUNSWICK	515-517 SYDNEY Road	31/01/2000	320507	5818297	662	-158	681	S-E
STATEMENT	57628-1	BRUNSWICK	208 ALBION Street	17/11/2006	320453	5818764	608	309	682	N-E
STATEMENT	38483-1	BRUNSWICK	4-7 CASSELS Road	24/05/1999	320274	5818995	429	540	690	N-E
CERTIFICATE	35955-1	BRUNSWICK	11 CASSELS Road	8/02/1999	320228	5819046	383	591	704	N-E
CERTIFICATE	57703-1	BRUNSWICK	3 WILLIAM Street	8/04/2008	320199	5819064	354	609	704	N-E
CERTIFICATE	62297-1	BRUNSWICK	1-7 COLEBROOK Street	22/05/2008	320336	5818966	491	511	709	N-E
STATEMENT	53528-2	BRUNSWICK	606 SYDNEY Road	13/12/2005	320572	5818470	727	15	727	N-E
STATEMENT	54059-1	BRUNSWICK	200 ALBION Street	22/02/2005	320509	5818755	664	300	729	N-E
STATEMENT	36111-A	BRUNSWICK WEST	490-492 VICTORIA Street	11/08/2004	319120	5818235	-725	-220	758	S-W
CERTIFICATE	36111-B	BRUNSWICK WEST	490-492 VICTORIA Street	11/08/2004	319120	5818235	-725	-220	758	S-W
CERTIFICATE	36111-C	BRUNSWICK WEST	490-492 VICTORIA Street	11/08/2004	319120	5818235	-725	-220	758	S-W

Appendix C1. Certificates and Statements of Environmental Audit for Nearby Sites

(Note: CARMs File Numbers in red are not available for review)

Issue	CARMs No.	Locality	Address	Date Completes	Easting	Northing	Difference East (m)	Difference North (m)	Radius from Site (m)	Direction from Site
CERTIFICATE	36111-D	BRUNSWICK WEST	490-492 VICTORIA Street	11/08/2004	319120	5818235	-725	-220	758	S-W
STATEMENT	51415-3	BRUNSWICK	FORMER HOFFMAN BRICKWORKS SITE 72-106 DAWSON STREET	18/04/2005	319660	5817713	-185	-742	765	S-W
STATEMENT	51415-2	BRUNSWICK	FORMER HOFFMAN BRICKWORKS SITE 72-106 DAWSON Street	2/03/2004	319660	5817713	-185	-742	765	S-W
STATEMENT	51415-1	BRUNSWICK	FORMER HOFFMAN BRICKWORKS SITE 72-106 DAWSON Street	29/12/2003	319660	5817713	-185	-742	765	S-W
STATEMENT	40625-1	BRUNSWICK	FORMER HOFFMAN BRICKWORKS SITE 72-106 DAWSON Street	19/07/2002	319660	5817713	-185	-742	765	S-W
STATEMENT	35028-1	BRUNSWICK	300-304 ALBERT Street	9/09/1998	320327	5817852	482	-603	772	S-E
STATEMENT	40573-1	BRUNSWICK	444-446 SYDNEY Road	31/01/2000	320525	5818013	680	-442	811	S-E
STATEMENT	52001-1	BRUNSWICK WEST	523-525 VICTORIA Street	9/06/2004	318983	5818299	-862	-156	876	S-W
STATEMENT	45459-1	BRUNSWICK WEST	118-124 MELVILLE Road	5/10/2001	318969	5818778	-876	323	934	N-W
STATEMENT	37795-2	BRUNSWICK	51-59 DAVID Street	27/04/2000	320546	5817787	701	-668	968	S-E
STATEMENT	39009-1	BRUNSWICK WEST	254 ALBERT Street	23/03/2000	320636	5817842	791	-613	1001	S-E
STATEMENT	41817-1	BRUNSWICK	123 MELVILLE Road	25/09/2000	318922	5818866	-923	411	1010	N-W
STATEMENT	36826-1	BRUNSWICK WEST	51-55 GRANTHAM Street	28/01/1999	319394	5817532	-451	-923	1027	S-W
STATEMENT	48497-1	BRUNSWICK WEST	137-139 MELVILLE Road	14/05/2003	318931	5818956	-914	501	1042	N-W
STATEMENT	48296-1	BRUNSWICK	1A FALLON Street	22/01/2003	319819	5817408	-26	-1047	1047	S-W
STATEMENT	25523-1	BRUNSWICK	74 DE CARLE Street	10/02/1995	320792	5818936	947	481	1062	N-E
STATEMENT	54037-2	BRUNSWICK	108-124 UNION Street	14/05/2007	319764	5817391	-81	-1064	1067	S-W
STATEMENT	38518-1	BRUNSWICK	8 SAXON Street	7/06/1999	320384	5817506	539	-949	1091	S-E
STATEMENT	44858-1	BRUNSWICK	180 UNION Street	13/12/2000	319424	5817433	-421	-1022	1105	S-W
STATEMENT	64229-1	BRUNSWICK	201-207 ALBERT STREET	30/09/2009	320794	5817876	949	-579	1112	S-E
STATEMENT	39567-1	BRUNSWICK	79 UNION Street	3/09/1999	319881	5817327	36	-1128	1129	S-E
STATEMENT	62431-1	BRUNSWICK	THE BRUNSWICK CLUB 203 SYDNEY Road	21/01/2008	320415	5817460	570	-995	1147	S-E
STATEMENT	56136-2	BRUNSWICK	34 UNION Street	22/05/2009	320203	5817338	358	-1117	1173	S-E
STATEMENT	48563-1	BRUNSWICK WEST	30-32A GRANTHAM Street	1/06/2004	319410	5817360	-435	-1095	1178	S-W
STATEMENT	38190-2	BRUNSWICK	20-28 UNION Street	29/02/2000	320292	5817315	447	-1140	1225	S-E
CERTIFICATE	33280-1	BRUNSWICK	1 MANALLACK Street	23/12/1997	320317	5817321	472	-1134	1228	S-E
STATEMENT	33306-1	BRUNSWICK	24 MERRI Street	20/07/1998	320597	5817453	752	-1002	1253	S-E
STATEMENT	62619-1	BRUNSWICK	28 MERRI Street	19/09/2009	320614	5817447	769	-1008	1268	S-E
STATEMENT	62767-1	BRUNSWICK	10 DODS Street	12/02/2009	320530	5817380	685	-1075	1275	S-E
STATEMENT	51279-1	BRUNSWICK	393 BARKLY Street	19/03/2003	319861	5817164	16	-1291	1291	S-E
STATEMENT	62070-1	BRUNSWICK	1 HELLER Street	22/12/2009	319595	5817163	-250	-1292	1316	S-W
STATEMENT	48894-1	BRUNSWICK	1A LITTLE GOLD Street	27/09/2002	320369	5817242	524	-1213	1321	S-E
STATEMENT	43145-1	BRUNSWICK	13 LITTLE GOLD Street	24/01/2001	320313	5817219	468	-1236	1322	S-E
STATEMENT	65073-1	BRUNSWICK	156A-160A SYDNEY Road	11/06/2009	320442	5817272	597	-1183	1325	S-E
STATEMENT	39412-1	BRUNSWICK	11 LITTLE GOLD Street	1/11/1999	320322	5817218	477	-1237	1326	S-E

Appendix C1. Certificates and Statements of Environmental Audit for Nearby Sites

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Issue	CARMs No.	Locality	Address	Date Completes	Easting	Northing	Difference East (m)	Difference North (m)	Radius from Site (m)	Direction from Site
STATEMENT	50690-1	BRUNSWICK	26-28 DODS Street	13/12/2002	320626	5817367	781	-1088	1339	S-E
STATEMENT	41815-1	BRUNSWICK	30 DODS Street	26/06/2000	320644	5817370	799	-1085	1347	S-E
STATEMENT	63156-1	BRUNSWICK	14-16 WILSON Avenue	5/02/2008	320320	5817194	475	-1261	1347	S-E
STATEMENT	52431-1	BRUNSWICK	10 WILSON Avenue	24/05/2004	320334	5817192	489	-1263	1354	S-E
CERTIFICATE	19183-1	BRUNSWICK	337-339 BRUNSWICK Road	14/01/1994	319861	5817050	16	-1405	1405	S-E
STATEMENT	60040-2	BRUNSWICK WEST	480-502 ALBION Street	31/05/2010	318547	5819001	-1298	546	1408	N-W
STATEMENT	60040-1	WEST BRUNSWICK	480-502 ALBION Street	30/04/2009	318547	5819001	-1298	546	1408	N-W
STATEMENT	38540-3	BRUNSWICK	405-407 BRUNSWICK Road	21/12/1999	319411	5817104	-434	-1351	1419	S-W
STATEMENT	49898-1	BRUNSWICK WEST	417-419 BRUNSWICK Road	2/06/2005	319325	5817125	-520	-1330	1428	S-W
STATEMENT	32288-1	BRUNSWICK	350-352 BRUNSWICK Road	27/08/1997	319437	5817062	-408	-1393	1452	S-W
CERTIFICATE	23268-A	BRUNSWICK WEST	27-29 EGGINTON Street	15/09/1994	318422	5818779	-1423	324	1459	N-W
STATEMENT	23268-B	BRUNSWICK WEST	27-29 EGGINTON Street	15/09/1994	318422	5818779	-1423	324	1459	N-W
STATEMENT	52068-1	BRUNSWICK	129 ALBERT Street	8/07/2003	321123	5817746	1278	-709	1461	S-E
STATEMENT	59754-1	BRUNSWICK	126A BLYTH Street	23/11/2007	321367	5818118	1522	-337	1559	S-E
STATEMENT	48462-1	BRUNSWICK EAST	447 LYGON Street	25/11/2002	321429	5818410	1584	-45	1585	S-E
STATEMENT	41816-1	BRUNSWICK	447A LYGON Street	2/08/2000	321429	5818410	1584	-45	1585	S-E
STATEMENT	43151-1	BRUNSWICK	449 LYGON Street	24/11/2000	321433	5818432	1588	-23	1588	S-E
STATEMENT	52816-1	BRUNSWICK EAST	408-432 LYGON Street	17/05/2004	321471	5818326	1626	-129	1631	S-E
STATEMENT	63350-1	BRUNSWICK EAST	380 LYGON Street	21/05/2008	321450	5818091	1605	-364	1646	S-E
STATEMENT	47082-1	BRUNSWICK EAST	374-378 LYGON Street	30/11/2001	321446	5818073	1601	-382	1646	S-E
STATEMENT	59290-1	BRUNSWICK	326-348 LYGON Street	20/12/2006	321425	5817924	1580	-531	1667	S-E
STATEMENT	61675-1	BRUNSWICK EAST	3 HOLMES Street	25/09/2007	321518	5818719	1673	264	1694	N-E
STATEMENT	43063-1	BRUNSWICK	191-197 LYGON Street	5/02/2001	321328	5817578	1483	-877	1723	S-E
STATEMENT	33305-2B	BRUNSWICK	149-151 GLENLYON Road	28/09/2001	321290	5817502	1445	-953	1731	S-E
STATEMENT	46926-1	BRUNSWICK	178 BARKLY Street	11/12/2001	320920	5816986	1075	-1469	1820	S-E
STATEMENT	50665-1	BRUNSWICK EAST	156-168 LYGON Street	25/03/2003	321361	5817410	1516	-1045	1841	S-E
STATEMENT	60035-1	EAST BRUNSWICK	6 INVERNESS Street	7/06/2006	321676	5818678	1831	223	1845	N-E
STATEMENT	57566-1	BRUNSWICK EAST	144 LYGON Street	3/08/2006	321356	5817350	1511	-1105	1872	S-E
STATEMENT	57084-1	BRUNSWICK EAST	22 FRENCH Avenue	15/01/2007	321555	5817664	1710	-791	1884	S-E
STATEMENT	41076-1	BRUNSWICK EAST	14 O'CONNOR Street	26/05/2000	321432	5817357	1587	-1098	1930	S-E
STATEMENT	57797-3	BRUNSWICK EAST	33-35 PIERA Street	28/07/2008	321478	5817313	1633	-1142	1993	S-E
STATEMENT	65042-2	BRUNSWICK	153 BARKLY Street	5/06/2009	321253	5816996	1408	-1459	2028	S-E
STATEMENT	41525-1	BRUNSWICK	123 BRUNSWICK Road	22/05/2000	321145	5816894	1300	-1561	2031	S-E
STATEMENT	66305-1	BRUNSWICK EAST	13-15 LEYDEN Street	2/12/2009	321525	5817289	1680	-1166	2045	S-E
STATEMENT	54480-2	BRUNSWICK EAST	170 EDWARD Street	29/07/2011	321431	5817161	1586	-1294	2047	S-E

Appendix C1. Certificates and Statements of Environmental Audit for Nearby Sites

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Issue	CARMs No.	Locality	Address	Date Completes	Easting	Northing	Difference East (m)	Difference North (m)	Radius from Site (m)	Direction from Site
STATEMENT	51743-1	BRUNSWICK EAST	26 CLARKE Street	19/03/2003	321604	5817309	1759	-1146	2099	S-E
STATEMENT	42618-1	BRUNSWICK EAST	29 LINDEN Street	7/09/2000	321632	5817332	1787	-1123	2111	S-E
STATEMENT	60555-1	BRUNSWICK	66-68A BRUNSWICK Road	6/09/2006	321189	5816819	1344	-1636	2117	S-E
STATEMENT	46490-1	BRUNSWICK EAST	20 LINDEN Street	10/12/2001	321625	5817306	1780	-1149	2119	S-E
STATEMENT	49846-1	BRUNSWICK	22 LINDEN Street	3/10/2003	321630	5817304	1785	-1151	2124	S-E
STATEMENT	62460-1	BRUNSWICK EAST	21-31 ST PHILLIP Street	21/08/2008	321433	5817042	1588	-1413	2126	S-E
STATEMENT	61298-1	BRUNSWICK EAST	6 CLARKE Street	14/05/2007	321604	5817226	1759	-1229	2146	S-E
STATEMENT	58335-1	BRUNSWICK EAST	40 ALBERT Street	24/04/2006	321874	5817704	2029	-751	2164	S-E
CERTIFICATE	66011-2	BRUNSWICK	1-9 LYGON Street	5/12/2011	321254	5816812	1409	-1643	2164	S-E
CERTIFICATE	62286-2	BRUNSWICK EAST	32 ALBERT Street	13/08/2007	321920	5817698	2075	-757	2209	S-E
STATEMENT	62286-1	BRUNSWICK EAST	32 ALBERT Street	30/05/2007	321920	5817698	2075	-757	2209	S-E
STATEMENT	43246-1	BRUNSWICK EAST	29 NUNAN Street	29/11/2000	322019	5818877	2174	422	2215	N-E
CERTIFICATE	32733-1	BRUNSWICK	10-12 ALBION Street	18/12/1997	322058	5818568	2213	113	2216	N-E
STATEMENT	55292-1	BRUNSWICK EAST	20 ALBERT Street	30/07/2004	321997	5817690	2152	-765	2284	S-E
STATEMENT	66241-1	BRUNSWICK EAST	69-73 BRUNSWICK Road	25/09/2009	321493	5816857	1648	-1598	2296	S-E
STATEMENT	31650-4	BRUNSWICK EAST	55 HARRISON Street	23/09/1999	322117	5818819	2272	364	2301	N-E
STATEMENT	31650-3	BRUNSWICK EAST	55 HARRISON Street	15/12/1998	322117	5818819	2272	364	2301	N-E
STATEMENT	31650-2	BRUNSWICK EAST	55 HARRISON Street	30/04/1998	322117	5818819	2272	364	2301	N-E
STATEMENT	31650-1	BRUNSWICK EAST	55 HARRISON Street	20/06/1997	322117	5818819	2272	364	2301	N-E
CERTIFICATE	42805-1	BRUNSWICK	46-48 HARRISON Street	12/02/2002	322146	5818725	2301	270	2317	N-E
CERTIFICATE	22057-1	BRUNSWICK	199-201 STEWART Street	23/02/1993	322192	5818295	2347	-160	2352	S-E
STATEMENT	33352-3	BRUNSWICK	209 STEWART Street	30/01/2002	322201	5818294	2356	-161	2361	S-E
STATEMENT	43147-A	BRUNSWICK EAST	246-256 STEWART Street	26/02/2001	322211	5818263	2366	-192	2374	S-E
STATEMENT	43147-B	BRUNSWICK EAST	246-256 STEWART Street	26/02/2001	322211	5818263	2366	-192	2374	S-E
STATEMENT	62592-1	BRUNSWICK EAST	12-20 MILLER Street	11/08/2008	321840	5817075	1995	-1380	2426	S-E
STATEMENT	66243-2	BRUNSWICK EAST	2&2A-3A BARKLY Street	28/10/2010	321903	5816822	2058	-1633	2627	S-E
STATEMENT	47383-1	BRUNSWICK	25-37 NICHOLSON Street	30/11/2001	321932	5816807	2087	-1648	2659	S-E
STATEMENT	29855 - 1	BRUNSWICK	HAMER STREET TRANSPORT DEPOT HAMER Street	3/03/1997	N/A	N/A	N/A	N/A	N/A	N/A

Appendix C2. Summary Information from Nearby Audits					
Address	107-109 HOPE Street	95 HOPE Street	5 HOLLOWAY Road	9-13 HOLLOWAY Road	64 HOPE Street
CARMs No.	34343-1	67519-1	29989-1	31185-1	42202-1
Distance From Site (m)	29	45	137	149	263
Direction From Site	S-W	S-E	S-W	S-W	N-E
Site History	Clay extraction, iron foundry & gatic foundry	Parcel delivery & paving company	Grocery, dairy, confectioner & car park	clay extraction, foundray & warehouse	Clothing warehouse
Geology	Tertiary age Newer Volcanics underlain by Upper Silurian Dargile Formation	Quaternary age Newer Volcanics	Silurian aged Dargile Formation	Tertiary aged Newer Volcains underlain by Upper Silurian Dargile Formation	Quaternary age Newer Volcanics also near Tertiary aged Brighton Group Red Bluff Sands & Upper Silurian Dargile Formation
USTs on-site	No	No	No	No	No
Soil Contamination	Metals & PAH	Metals & PAH	Metals (Cr, Pb, Ni & Zn)	Metals (Cu, Pb & Zn)	Metals (Pb & Zn)
Number of Groundwater Bores Installed	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids (mg/L)	Likely to be 3000 to 7000	Likely to be 3500 to 13000	N/A	N/A	Likely to be 3000 to 7000
Groundwater Segment	Seg B or C	Seg C	N/A	N/A	Seg B or C
Groundwater Flow Direction	Likely to be to the west	Likely to be west to south-west	N/A	N/A	Likely to be south-west
Standing Water Level (m)	N/A	Likely to be 10 to 15 m	N/A	Likely to be 8 to 10 m	Likely to be 3.0 to 8.5 m
Groundwater Contamination	N/A	N/A	N/A	N/A	N/A
Remediation Work	Removal of contaminated soil	N/A	Site capped	Removal of contaminated soil	Removal of contaminated soil

APPENDIX D

GROUNDWATER DATABASE SEARCH

DNRE Groundwater Database Search - Location (Melb_loc) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE ID	OLD BORE NO.	RIG NO./ LIC NO.	BORE AUTH	AMG SHEET	AMG ZONE	EAST	NORTH	DATE COMPLETED	TOTAL DEPTH (m)	RLNS	BORE TYPE	USES	DRILL METHOD	LOGS G D	AQUIF FROM (m)	AQUIF TO (m)	TSS mg/L	Difference East (m)	Difference North (m)	Radius (km)
310707	468	NONE	SEC	782221	55	318799	5818221	12/03/1974	5.49		NK	SE		N N				-1047	-234	1.07
310708	471	NONE	SEC	782221	55	318799	5818221	12/03/1974	6.1		NK	SE		N N				-1047	-234	1.07
310709	472	NONE	SEC	782221	55	318799	5818221	12/03/1974	2.44		NK	SE		N N				-1047	-234	1.07
310710	475	NONE	SEC	782221	55	318799	5818221	12/03/1974	3.05		NK	SE		N N				-1047	-234	1.07
310711	479	NONE	SEC	782221	55	318799	5818221	12/03/1974	5.64		NK	SE		N N				-1047	-234	1.07
68324	10002	20668	LAND	782221	55	318373	5818393	6/02/1983	3.9		GW	DM		N N				-1473	-62	1.47
140044	*****	54035	NKN	782222	55	319383	5816903	11/01/2000	9		GW	IV	NKN	N Y				-463	-1552	1.62
140043	*****	54035	NKN	782222	55	319382	5816902	20/10/1999	10		GW	IV	NKN	N Y				-464	-1553	1.62
140042	*****	54035	NKN	782222	55	319381	5816901	21/10/1999	10		GW	IV	NKN	N Y				-465	-1554	1.62
140041	*****	54035	NKN	782222	55	319380	5816900	20/08/1999	10		GW	IV	NKN	N Y				-466	-1555	1.62
122008	*****	42062	NKN	782221	55	321809	5818489	16/04/1994	16		GW	IV	ROA	N Y				1963	34	1.96

DNRE Groundwater Database Search - Composition (Melb_com) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE Id	ParNo	DITR No	Date Completed	Aquif From (m)	Aquif To (m)	Lith	SWL (m)	Pump Rate (l/sec)	Time (h:m)	Draw-down (m)	Latest Chemical Analysis Date Sampled	SWL Sample	MTH	TSS	CL	FE Total	PH	EC	Hard
68324	32796	10002	6/02/1983	3	3.5	BASA	3	3.3		3.5		0		0	0	0	0	0	0
122008	32796		16/04/1994	14.2	0		0		2:00	0		0		0	0	0	0	0	0
140041	32796		20/08/1999	7	0		0		0:15	0		0		0	0	0	0	0	0
140042	32796		21/10/1999	7	0		0		0:15	0		0		0	0	0	0	0	0
140043	32796		20/10/1999	7.5	0		0		0:15	0		0		0	0	0	0	0	0
140044	32796		11/01/2000	7	0		0		0:15	0		0		0	0	0	0	0	0
310707	32796	468	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310708	32796	471	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310709	32796	472	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310710	32796	475	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0
310711	32796	479	12/03/1974	0	0		0		0:38	0		0		0	0	0	0	0	0

DNRE Groundwater Database Search - Aquifer (Melb_aq) for 101 - 105 Hope Street, Brunswick, Victoria

Site Location: AMG Ref: North 5818 455 & East 319 846

BORE ID	OLD BORE NO.	WATER SCREEN	FROM (m)	TO (m)	LITHO LOGY	CASING DEPTH (m)	DIA (mm)	TYP	APER (mm)	SWL (m)	PUMP DEPTH (m)	PUMP RATE (l/sec)	PUMP TIME (H:M)	DRAW DOWN (m)	REC TIME (H:M)	EC	TEST TYPE	TEST DATE
68324	10002	WATER	3	3.5	BASA			NKN		3	3.5	3.33		3.5			PUM	6/02/1983
		SCREEN	3	3.5	NOT			NKN		3		3.33		3.5			PUM	6/02/1983
122008	*****	SCREEN	13	16			50	PSL					2:00					16/04/1994
		WATER	14.2			13	50	P09										16/04/1994
140041	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	20/08/1999
		WATER	7			7	50	P18										20/08/1999
140042	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	21/10/1999
		WATER	7			7	50	P18										21/10/1999
140043	*****	SCREEN	7	10			50	PSL	1			0.1	0:15				PUM	20/10/1999
		WATER	7.5			7	50	P18										20/10/1999
140044	*****	SCREEN	6	9			50	PSL	1			0.1	0:15				PUM	11/01/2000
		WATER	7			6	50	P18										11/01/2000

APPENDIX E

WORKSAFE LETTER

GPO Box 4293 Melbourne VIC 3001
Tel/ 1300 852 562 Fax/ 1800 060 727
Email/ licensing@worksafe.vic.gov.au
worksafe.vic.gov.au

Reference: H09/00121

4 May 2009

Costa Diomides
Senior Environmental Scientist
Diomides & Associates Pty Ltd
11 Conway Avenue
DONVALE VIC 3111

Dear Mr Diomides

Your Ref: Dangerous Goods Database Search at

101 Hope Street Brunswick

I refer to your fax received 16 April and 28 April and confirm that we have searched our database records for the above address. I advise that WorkSafe Victoria has no record of Dangerous Goods Storage and Handling at the above premises and a printout is attached.

For queries on this matter, please do not hesitate to contact the Licensing Branch on telephone 1300 852 562 or facsimile 1300 060 727.

Yours sincerely

Rachael Griffin
Senior Licensing Officer
WorkSafe Victoria

Encl.
APPROVE screen print
Result: No records

LET007/05/01.08

No records for 101 Hope Street Brunswick

Reflection for the Web - Mainframe

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OPSE10N    SRCHENQ        Occupational Health & Safety              04/05/2009
OPSE10M1   T310RAG        Approval & Licensing System                 09:11:12
                               Search and Enquire
+-------------------------------------------------------------------------------+
|                                                                               |
|                         ADDRESS SEARCH CRITERIA                   OPSE61M1    |
|                            (Exact Address)                                    |
|                                                                               |
|                                                                               |
|                                                                               |
|                                                                               |
|   Action   Full Address                                                       |
|      _     101 HOPE STREET, BRUNSWICK 3056                                    |
|      _       +-----------------------------------------------+                |
|      _       |                                               |                |
|      _       |                W A R N I N G                  |                |
|      _       |      No Licences are Registered at the        |                |
|              |                  1st Premise(s)               |                |
|              |       for the Licence Types specified         |                |
|              |  Press <ENTER> to Continue and Store Criteria |                |
|              | or                                            |                |
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APPENDIX F

SUMMARY OF SANDS & MCDOUGALL

DIRECTORY OF VICTORIA

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1974	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Norris, L. R.*
	9 Alexander St.	*Denson (Aust.) Pty Ltd (Anti corrosive tapes)*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*Tyler, G. W. Pty Ltd (Electrical contractor)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67-67a Hope St.	*Bastow Engineering (Engineers)*
	69 Hope St.	*Storage*
	71-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93 Hope St.	*Ranfaldi, S.*
	95 Hope St.	*Caruto, T. C. (Paving)*
	93-99 Hope St.	*Rex Fast Freight Transport Service*
	101-109 Hope St.	**Marbut Moulding Pty Ltd**
	111 Hope St.	*Delco, P.*
	111 Hope St.	*Hindle, Mrs. B. (Sandwich bar)*
	113-123 Hope St.	*Individual Private Residences*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-76 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1974 (Cont…)	Victoria St. (North Side)	
	381-385 Victoria St.	*Parterio Holding Pty Ltd*
	381-385 Victoria St.	*L. D. Transport Co Pty Ltd (Transport service)*
	381-385 Victoria St.	*Southern Sand & Gravel Pty Ltd (Sand supplies)*
	381-385 Victoria St.	*Parterio Contracts Pty Ltd (Cartage contractors)*
	387 Victoria St.	*Leslie, B. N. (Confectioner)*
	389-391 Victoria St.	*Parterio, L. (Sand supplies)*
	393-395 Victoria St.	*Parterio Holding Pty Ltd (Storage)*
	397 Victoria St.	*McFee Construction Engineering Pty Ltd (Engineers)*
	399-417 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	405 Victoria St.	*Hanson, W. (Caretaker)*
	- Int. Alexander St. -	
	419-423 Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	425 Victoria St.	*Cain, A.*
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*
1964	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Norris, L. R.*
	9 Alexander St.	*Arnold, B.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, P. (Butcher)*
	112-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, M. J. (Grocer)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1964 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67-67a Hope St.	*Bastow Engineering (Engineers)*
	67-67a Hope St.	*Gatens, G. (Electroplaters)*
	69 Hope St.	*Not available*
	71-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-99 Hope St.	*Not available*
	101-109 Hope St.	**Marbut Moulding Pty Ltd**
	111 Hope St.	*Dwyer*
	111 Hope St.	*Allan's Sandwich Bar*
	113-125 Hope St.	*Individual Private Residences*
	127 Hope St.	*Plane, E. C. (Confectioner)*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*
	Victoria St. (North Side)	
	379-387 Victoria St.	*Individual Private Residences*
	389-391 Victoria St.	*Storage*
	393-395 Victoria St.	*Muir, E. W.*
	397 Victoria St.	*Parterio, L. (Sand supplies)*
	397 Victoria St.	*Pye Communication Services*
	399-417 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	405 Victoria St.	*Hanson, W. (Caretaker)*
	- Int. Alexander St. -	
	419-423 Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	425 Victoria St.	*Hurrell, A. (Greens keeper)*
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1954	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Innis, F.*
	9 Alexander St.	*Hastings, R. E.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, P. (Butcher)*
	112-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, Miss. M. J. (Grocer)*
	188a-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-148 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Roberts & Clarke (Brass foundry)*
	67 Hope St.	*Johns, E. (Boot repairer)*
	69-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	99 Hope St.	*Buckland's Concrete Works Pty Ltd*
	101-109 Hope St.	**Marbut Pty Ltd (Motor engineers)**
	111-123 Hope St.	*Individual Private Residences*
	125 Hope St.	*Trower, H. F. (Grocer)*
	127 Hope St.	*Smith, R. (Confectioner)*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1954 (Cont…)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *64 Victoria St.* *68-112 Victoria St.* *114 Victoria St.* *116-118 Victoria St.* *120-123 Victoria St.* *126 Victoria St.* *140 Victoria St.* *142-153 Victoria St.* *- Int. Alexander St. -* *156 Victoria St.* *- Brunswick Park & Recreation Reserve -* *- Brunswick Bowling & Crqt Clubs -* *- Reaburn Reserve -* *- Int. Pearson St. -* <u>Wendel St.</u>	 *R.S.S.I.L.A. Memorial Hall* *Individual Private Residences* *Curry, Mrs. T. G. (Confectioner)* *Individual Private Residences* *Mitchell T & Co. Pty Ltd (Factory)* *Hanson, W. (Caretaker)* *Harvey, T.* *Mitchell T & Co. Pty Ltd (Brass foundry)* *Melbourne Pottery Co. Pty Ltd* *No listing*
1944/45	<u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *7 Alexander St.* *9 Alexander St.* <u>Cliff St. (North Side)</u> *2 – 44 Cliff St.* <u>Cliff St. (South Side)</u> *1 – 35 Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *92-104 Hope St.* *- Int. Austral Ave. –* *106-110 Hope St.* *112 Hope St.* *112-116 Hope St.* *- Int. Sutherland St. –* *118 Hope St.* *188a-130 Hope St.* *- Int. Hanover St. –* *134-146 Hope St.* *- Int. Fraser St. –*	 *Howard, M. W. C.* *Applin, H. J.* *Individual Private Residences* *Individual Private Residences* *No listing* *Individual Private Residences* *Individual Private Residences* *Cleeve, P. (Butcher)* *Individual Private Residences* *O'Meara, R. G. (Grocer)* *Individual Private Residences* *Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1944/45 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Kennedy, Mrs. E. E. (Library)*
	67 Hope St.	*Johns, E. (Boot repairer)*
	67a Hope St.	*Adams, R. (Brass foundry)*
	69-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	99 Hope St.	*Buckland's Concrete Works Pty Ltd*
	101-109 Hope St.	**Marbut Pty Ltd (Motor engineers)**
	109a Hope St.	*Gatic Engineering Pty Ltd (Iron founders engineers)*
	111-123 Hope St.	*Individual Private Residences*
	125-127 Hope St.	*Armstrong & Shutler Grocers & Confectioners*
	- Int. Holloway Rd. –	
	129-133 Hope St.	*Individual Private Residences*
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*
	59 Lyle St.	*Scouts Hall*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	64 Victoria St.	*R.S.S.I.L.A. Memorial Hall*
	68-76 Victoria St.	*Individual Private Residences*
	78 Victoria St.	*Borrett, G. T. (Leather good manufacturers)*
	80-118 Victoria St.	*Individual Private Residences*
	120-124 Victoria St.	*Mitchell T & Co. Pty Ltd (Sawmills)*
	126 Victoria St.	*Spicer, H. T.*
	128-136 Victoria St.	*Mitchell T & Co. Pty Ltd (Brush manufacturers)*
	138-140 Victoria St.	*Individual Private Residences*
	142-144 Victoria St.	*Private garage*
	152 Victoria St.	*Mitchell T & Co. Pty Ltd (Nail manufacturers)*
	- Int. Alexander St. -	
	Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Brunswick Bowling & Crqt Clubs -	
	- Reaburn Reserve -	
	- Int. Pearson St. -	
	Wendel St.	*No listing*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1934	Alexander St. (West Side)	
	- Int. Victoria St. –	
	7 Alexander St.	*Wright, C. J.*
	Cliff St. (North Side)	
	2 – 44 Cliff St.	*Individual Private Residences*
	Cliff St.	*Bucklland Reinforced Concrete Works Pty Ltd*
	- Int. Hope St. –	
	Cliff St. (South Side)	
	1 – 35 Cliff St.	*Individual Private Residences*
	- Int. Hope St. –	
	Henkel St.	*No listing*
	Hope St. (North Side)	
	- Int. Ford St. –	
	92-104 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	106-110 Hope St.	*Individual Private Residences*
	112 Hope St.	*Cleeve, F. H. (Butcher)*
	114-116 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	118 Hope St.	*O'Meara, R. G. (Grocer)*
	120-130 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	134-146 Hope St.	*Individual Private Residences*
	- Int. Fraser St. –	
	Hope St. (South Side)	
	- Int. Gregory St. –	
	65 Hope St.	*Vacant*
	67 Hope St.	*Johns, E. (Boot repairer)*
	67-69 Hope St.	*Adams, R. F. (Brass foundry)*
	71-75 Hope St.	*Individual Private Residences*
	77 Hope St.	*Conlon, F. (Wood yard)*
	79-91 Hope St.	*Individual Private Residences*
	- Int. Cliff St. –	
	93-97 Hope St.	*Individual Private Residences*
	101-109 Hope St.	**Marbut Pty Ltd (Moulding makers & motor engineers)**
	109 Hope St.	*Monarch Foundry Pty Ltd (Iron founders)*
	111 Hope St.	*O'Brien, J. G.*
	111 Hope St.	*Piper, Miss, E. (Cast maker)*
	113-121 Hope St.	*Individual Private Residences*
	125 Hope St.	*Foster, V. E. (Dairy production)*
	127 Hope St.	*Shutler & Armstrong (Confectioners)*
	- Int. Holloway Rd. –	
	- Brunswick Recreation Res. -	
	135-141 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-78 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	1-57 Lyle St.	*Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1934 (Cont...)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *68-112 Victoria St.* *114-116 Victoria St.* *118 Victoria St.* *120-124 Victoria St.* *126 Victoria St.* *128 Victoria St.* *132 Victoria St.* *134 Victoria St.* *136 Victoria St.* *138-140 Victoria St.* *140-150 Victoria St.* *152 Victoria St.* *- Int. Alexander St. -* *Victoria St.* *- Brunswick Park &* *Recreation Reserve -* *- Int. Pearson St. –*	 *Individual Private Residences* *Muir, E. (Confectioner)* *Fairy, G. J.* *Mitchell T & Co. Pty Ltd (Sawmills)* *Spicer, H.* *Brunswick Brush Co.* *Gorden, J. A.* *Vacant* *Store room only* *Individual Private Residences* *Private garage* *Mitchell T & Co. Pty Ltd (Nail manufacturers)* *Melbourne Pottery Co. Pty Ltd*
1924	<u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *7 Alexander St.* <u>Cliff St. (North Side)</u> *2 – 26 Cliff St.* *- Int. Gregory St. –* <u>Cliff St. (South Side)</u> *1 – 51 Cliff St.* *Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *126-140 Hope St.* *- Int. Austral Ave. –* *142-152 Hope St.* *- Int. Sutherland St. –* *154 Hope St.* *156-168 Hope St.* *- Int. Hanover St. –* *172-184 Hope St.* *- Int. Fraser St. –*	 *Madigan, S. P.* *Individual Private Residences* *Individual Private Residences* *House being built* *No listing* *Individual Private Residences* *Individual Private Residences* *Lamb, G. (Grocer)* *Individual Private Residences* *Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1924 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	67-79 Hope St.	*Individual Private Residences*
	81a Hope St.	*Gunston, T. (Butcher)*
	81 Hope St.	*Boyd, W. J.*
	81 Hope St.	*Boyd, Mrs. Edith (Greengrocer & confectioner)*
	81b Hope St.	*Wooding, S. (Boot maker)*
	83-103 Hope St.	*Individual Private Residences*
	- Int. Gregory St. –	
	105 Hope St.	*Adams, Mrs. E. (Fruiterer)*
	105 Hope St.	*Jones, L. R. (Boot repairer)*
	105 Hope St.	*Adams, R. F. (Brass foundry)*
	107-163 Hope St.	*Individual Private Residences*
	Hope St.	*Evens Bros. (Builders)*
	Hope St.	**Australasian Marbut Carving Co. Pty Ltd (Moulding makers)**
	Hope St.	**Marbut Engineering Service (Motor engineers)**
	173 Hope St.	*Briggs, Mrs. C. A. (Confectioner)*
	173-183 Hope St.	*Individual Private Residences*
	- Int. Holloway Rd. –	
	- Brunswick Recreation Res. -	
	259-265 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-84 Lyle St.	*Individual Private Residences*
	Lyle St. (South Side)	
	5-87 Lyle St.	*Individual Private Residences*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	76-134 Victoria St.	*Individual Private Residences*
	136-138 Victoria St.	*Littlejohn, E. E. (Wood yard & confectioner)*
	140 Victoria St.	*O'Brien, J.*
	142-152 Victoria St.	*Mitchell T & Co. Pty Ltd (Sawmills)*
	152 Victoria St.	*Spicer, H.*
	160 Victoria St.	*Brunswick Brush Co.*
	168 Victoria St.	*Roberts, R. M.*
	170 Victoria St.	*Williams, P.*
	172 Victoria St.	*Stack, S. & Co. (Manufacturing roofing material)*
	174-176 Victoria St.	*Individual Private Residences*
	174-184 Victoria St.	*Victorian Broom Co.*
	Victoria St.	*Motor garage*
	- Int. Alexander St. -	
	Victoria St.	*Melbourne Pottery Co. Pty Ltd*
	- Brunswick Park & Recreation Reserve -	
	- Int. Pearson St.	

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1914	<u>Alexander St. (East Side)</u>	
	- Int. Victoria St. –	
	Alexander St.	*Beebe, S.*
	Alexander St.	*Kors, Mrs. C.*
	- Int. Hope St. –	
	<u>Alexander St. (West Side)</u>	
	- Int. Victoria St. –	
	7 Alexander St.	*White, W.*
	Alexander St.	*Brick kiln*
	- Int. Hope St. –	
	<u>Cliff St. (North Side)</u>	
	2 – 20 Cliff St.	*Individual Private Residences*
	- Int. Gregory St. –	
	<u>Cliff St. (South Side)</u>	
	21 – 39 Cliff St.	*Individual Private Residences*
	<u>Henkel St.</u>	*No listing*
	<u>Hope St. (North Side)</u>	
	- Int. Ford St. –	
	126-140 Hope St.	*Individual Private Residences*
	- Int. Austral Ave. –	
	Hope St.	*Receiving Box (P.O)*
	142-148 Hope St.	*Individual Private Residences*
	- Int. Sutherland St. –	
	156-168 Hope St.	*Individual Private Residences*
	- Int. Hanover St. –	
	172-200 Hope St.	*Individual Private Residences*
	Hope St.	*Tucker, H. W.*
	- Int. Fraser St. –	
	<u>Hope St. (South Side)</u>	
	- Int. Gregory St. –	
	105-131 Hope St.	*Individual Private Residences*
	163 Hope St.	*Evens, H. (Builder)*
	Hope St.	*Evens Bros. (Builder)*
	- Int. Alexander St. –	
	- Brunswick Recreation Res. -	
	259-265 Hope St.	*Individual Private Residences*
	- Int. Pearson St. -	
	<u>Lyle St. (North Side)</u>	
	2-81 Lyle St.	*Individual Private Residences*
	<u>Lyle St. (South Side)</u>	
	5-87 Lyle St.	*Individual Private Residences*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1914 (Cont…)	<u>Victoria St. (North Side)</u> *- Int. Percy St. -* *76-134 Victoria St.* *136 Victoria St.* *138 Victoria St.* *- Int. Gardener St. -* *Victoria St.* *168 Victoria St.* *172 Victoria St.* *174-176 Victoria St.* *Victoria St.* *Victoria St.* *- Int. Alexander St. -* *Victoria St.* *- Brunswick Park & Recreation Reserve -* *- Int. Pearson St. -*	 *Individual Private Residences* *Littlejohn, E. E. (Confectioner)* *Littlejohn, E. E.* *Spicer, H.* *Littlejohn, J.* *Excelsion Brush Co. – Goodwin, H. (Manager)* *Individual Private Residences* *Victorian Broom Co. – Storey, F. J. (Manager)* *Motor garage* *Melbourne Pottery Co. Pty Ltd – Evans, J. P. (Manager)*
1904	<u>Alexander St. (East Side)</u> *- Int. Victoria St. –* *Alexander St.* *Alexander St.* *Alexander St.* *Alexander St.* *- Int. Hope St. –* <u>Alexander St. (West Side)</u> *- Int. Victoria St. –* *Alexander St.* *Alexander St.* *- Int. Hope St. –* <u>Cliff St. (North Side)</u> *- Int. Gregory St. –* *- Right-of-way. –* *2 – 10 Cliff St.* *- Int. Percy St. –* <u>Cliff St. (South Side)</u> *- Int. Percy St. –* *- Right-of-way. –* *- Int. Gregory St. –* *- Right-of-way. –* *117 Cliff St.* <u>Henkel St.</u> <u>Hope St. (North Side)</u> *- Int. Ford St. –* *- Int. Sutherland St. –* *156-168 Hope St.* *- Int. Hanover St. –* *Hope St.* *- Int. Fraser St. –*	 *Brick yard* *Healey, J.* *Kieley, M.* *Doyle, J.* *Scott, J.* *Brick kiln* *Individual Private Residences* *Loves, Mrs. Regina* *No listing* *Boyle, W. H. “Norma”*

Sands & McDougall Victorian Directory Search

Year	Street No.	Details
1904 (Cont…)	Hope St. (South Side)	
	- Int. Gregory St. –	
	105-129 Hope St.	*Individual Private Residences*
	163 Hope St.	*Evens, P.*
	Hope St.	*Evens Bros. (Builders & contractors)*
	- Int. Alexander St. –	
	- Int. Wilson St. –	
	Hope St.	*Wilson, J. R.*
	- Int. Pearson St. -	
	Lyle St. (North Side)	
	2-82 Lyle St.	*Individual Private Residences*
	Lyle St.	*Paddock*
	Lyle St. (South Side)	
	7-57 Lyle St.	*Individual Private Residences*
	Lyle St.	*Standard Pottery – Hancock & Ramage*
	Victoria St. (North Side)	
	- Int. Percy St. -	
	82-134 Victoria St.	*Individual Private Residences*
	- Int. Gardener St. -	
	168 Victoria St.	*Littlejohn, J. (Broom manufacturer)*
	- Int. Alexander St. -	
	- Int. Wilson St. -	
	- Int. Pearson St. –	

Notes: Text shown in italics relate to neighbouring properties

APPENDIX G

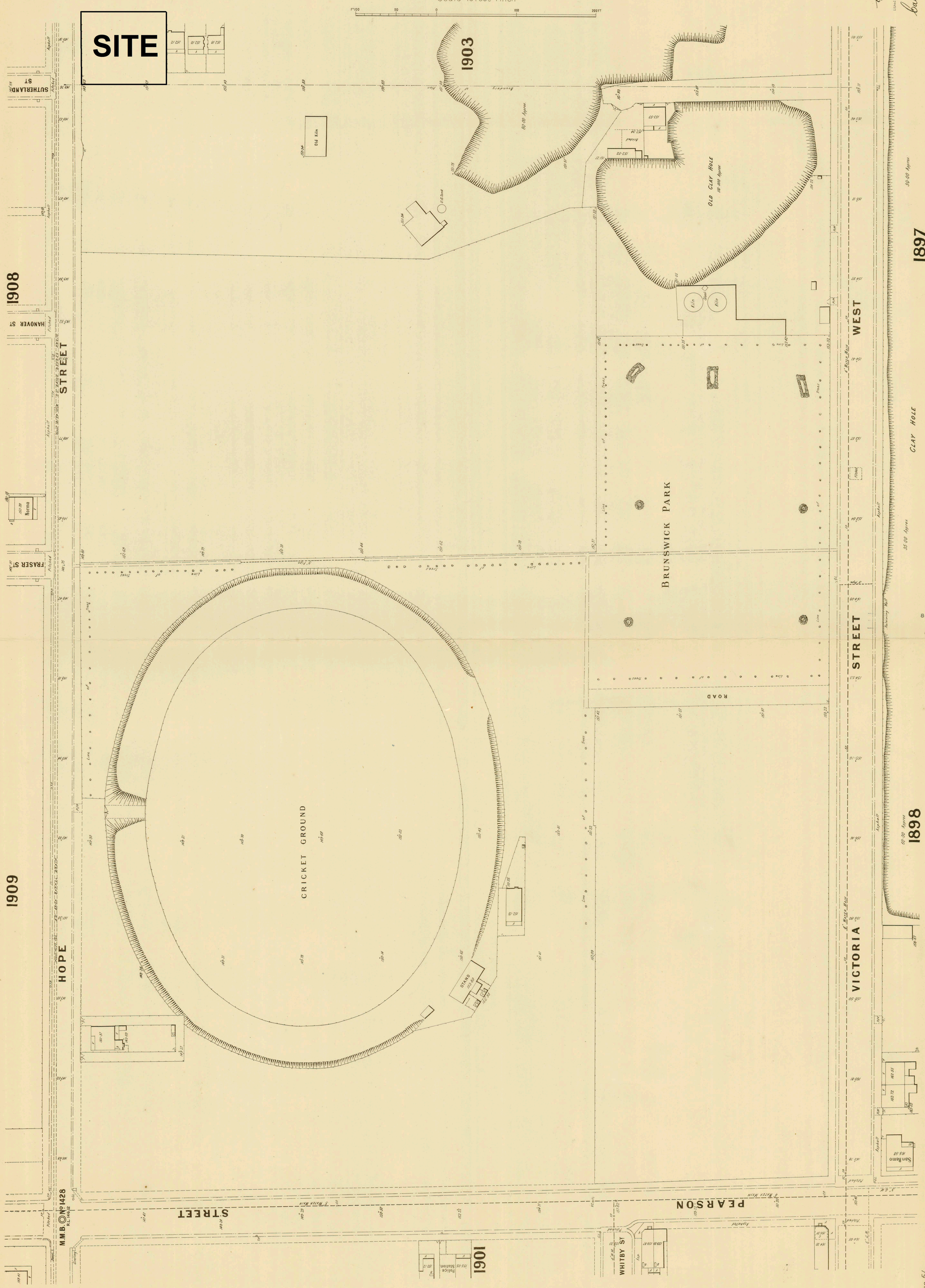
MMBW PLANS – 1906 & 1908

MELBOURNE AND METROPOLITAN BOARD OF WORKS.

CITY OF BRUNSWICK

DETAIL PLAN No. 1902

Scale 40 Feet - 1 Inch



Geo. H. Grant
Surveyor
L.I.Mech.E.M., Cert. I.M.O. May 1906 No. 2 Cert. B 1896.

Walter R. Oliver
Engineer-in-Chief.

821.09E
1896-
1907

Price 5/-

MELBOURNE AND METROPOLITAN BOARD OF WORKS.

TOWN OF BRUNSWICK

DETAIL PLAN No. 1903

Scale 40 Feet = 1 Inch

FT 100 50 0 100 200 FT

— REFERENCE —

Main Sewer
Main Branches
Reticulation Sewer 9" 6" 4" 3"
Connection
RED: Circular Manhole M.
Square M.
Oblong M.
Penstock P.M.
Manhole with Drop M.D.
Ventilator V
Inspection Shaft I.S.
Inspection Opening I.O.
Flushing Syphon F.S.
Section Sheet No. S.S.No.
BLUE: Gradient & Size of Pipe
Green Figures denote No. of item in Schedule of Quantities

Geo. H. Grant
Surveyor
LOW, EVANS & LUND MELB. 1903 & 1904 & 1906

W. Thiele
Eng. in Chief
26.3.06

22 MAR 1906

1904
1896
1906
1908
1902

FREDERICK ST
OSBORNE ST
DAVIDSON ST
FORD ST
PRITCHARD ST
SUTHERLAND ST
PERCY STREET
GREGORY STREET
PATERSON STREET
HOPE STREET
LYLE STREET
BALLARAT STREET
TALBOT STREET
VICTORIA STREET
WEST STREET
LESLIE ST
GARDENER ST
CLIFF

Gas Works
Gasometer 1873
Brunswick
Marlborough
"Wareek"
Ephysstone
Middleborough
Lancashire Alliance
Pottery
Federal
Office
Kiln
Clay Hole
Broom Factory
Old Clay Hole
Boundary of Plan
Old Kiln
Works
Price 5/-

SITE

APPENDIX H

AERIAL PHOTOGRAPHS -

1951, 1968, 1982 & 2007

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

AERIAL PHOTOGRAPH - 1951

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

AERIAL PHOTOGRAPH – 1951 (ZOOM-IN)		

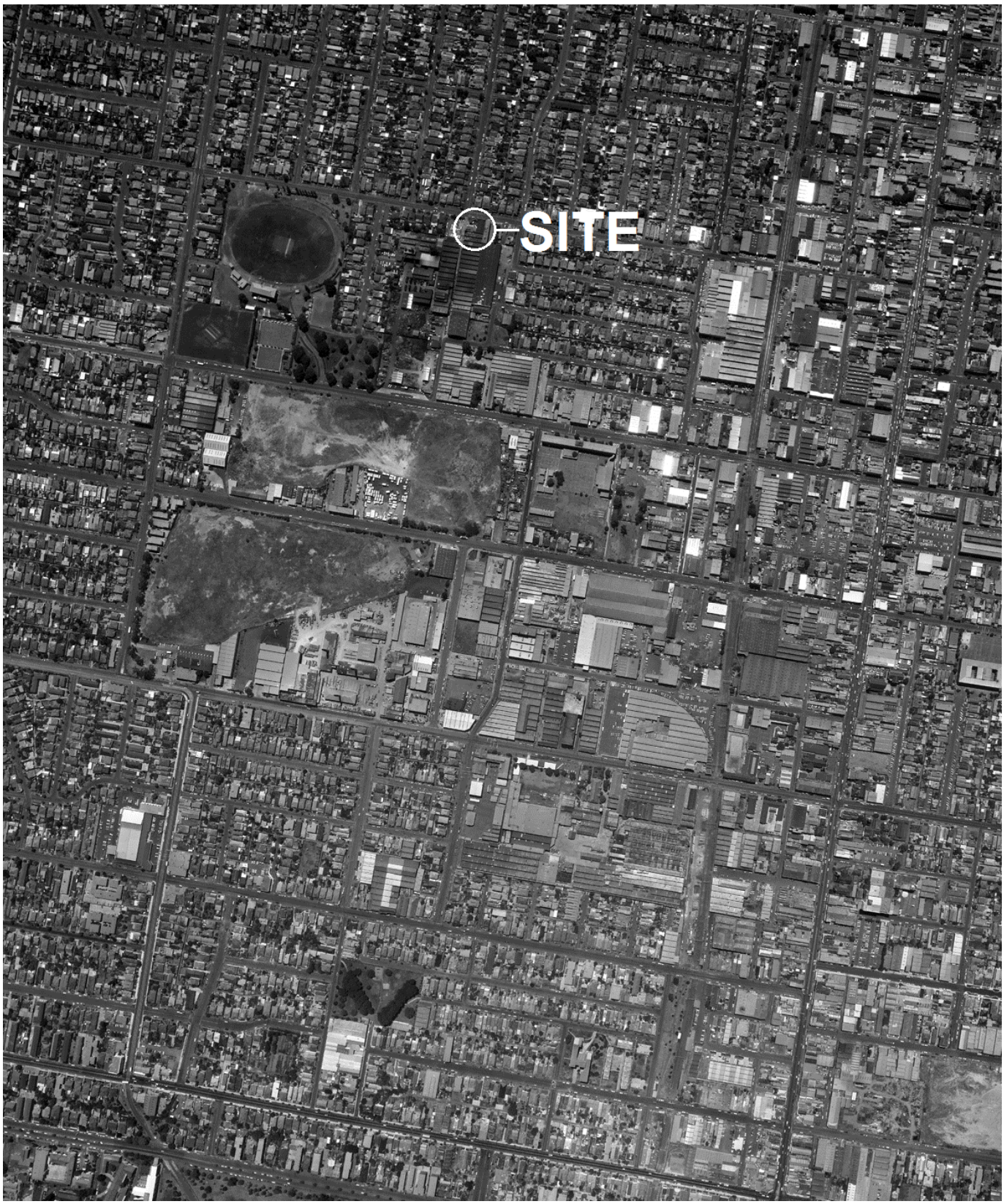
DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

AERIAL PHOTOGRAPH - 1968		

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

AERIAL PHOTOGRAPH – 1968 (ZOOM-IN)		

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

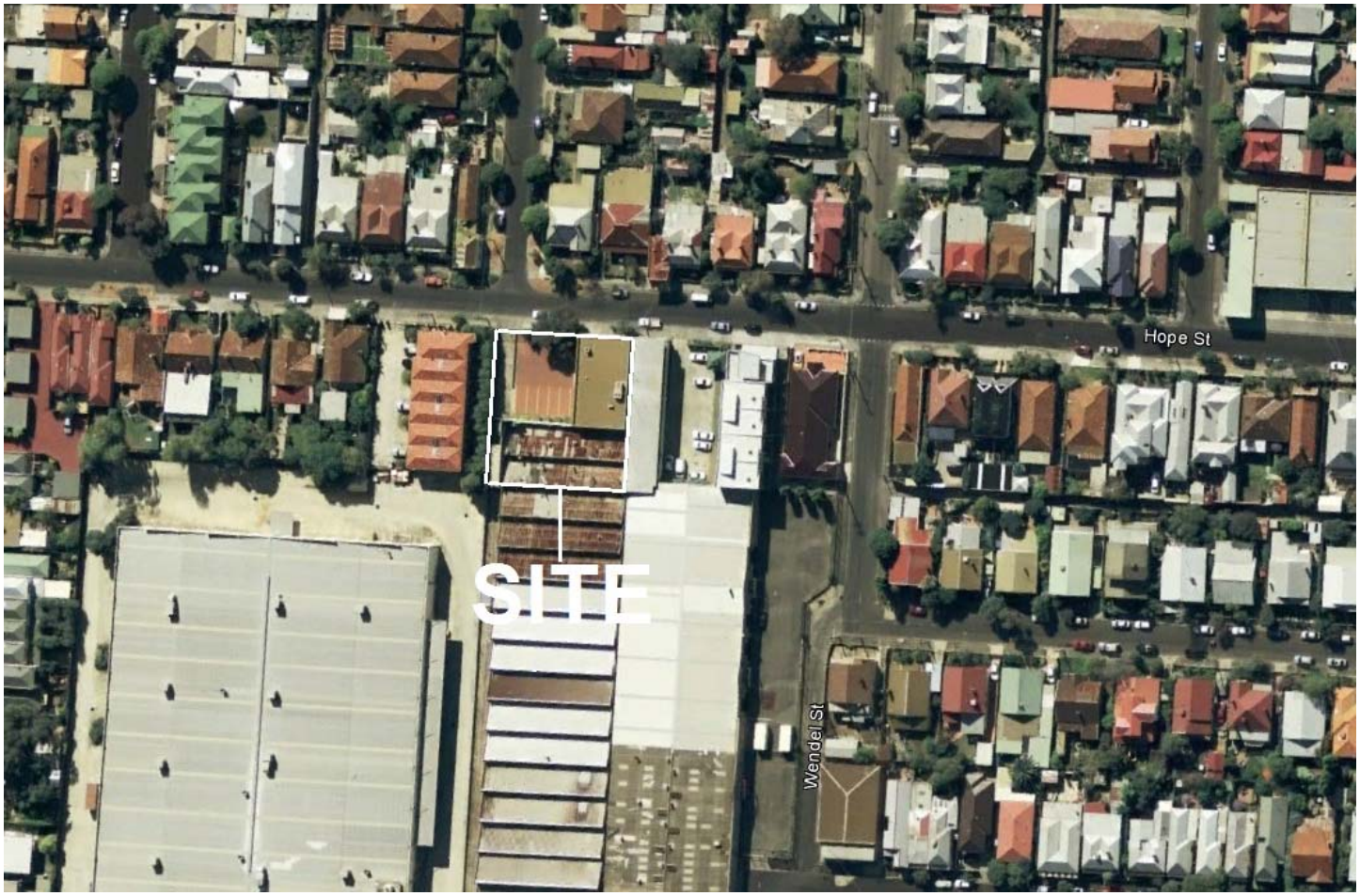


AERIAL PHOTOGRAPH - 1982		

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012

AERIAL PHOTOGRAPH – 1982 (ZOOM-IN)		

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**JOB:** 101 – 105 Hope Street, Brunswick, Victoria	**JOB No** DA1468 ---------- **DATE:** June, 2012



AERIAL PHOTOGRAPH - 2007		

APPENDIX I

BOREHOLE/TEST PIT LOGS

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Borehole No.: BH 1**

BOREHOLE LOG

Description		Depth (metres)	Sample or Test	Description/Rank
		0.00		
	Concrete 0.15 m	0.10		
Fill	- Grey clay & orange sand (dry) - No visible asbestos - No odour	0.20	●	BH 1, 0.15-0.25 m Contamination Ranking = 0 P.I.D. = 8.9 ppm
		0.30		
Natural	- Grey (dry) - Basaltic clay - No odour	0.40	●	BH 1, 0.3-0.4 m Contamination Ranking = 0 P.I.D. = 3.1 ppm
		0.50		
	End of borehole	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Borehole No.: BH 2**

BOREHOLE LOG

Description		Depth (metres)	Sample or Test	Description/Rank
	Concrete 0.11 m	0.00		
Fill	- Grey to brown silty clay (dry) - No visible asbestos - No odour	0.10 0.20	●	BH 2, 0.1-0.2 m Contamination Ranking = 0 P.I.D. = 8.3 ppm
Natural	- Grey (dry) - Basaltic clay - No odour	0.30 0.40 0.50	●	BH 2, 0.3-0.4 m BLIND & SPLIT Contamination Ranking = 0 P.I.D. = 7.6 ppm
	End of borehole	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Test Pit No.: TP 3**

TEST PIT LOG

Description		Depth (metres)	Sample or Test	Description/Rank
	Concrete & brick layer 0.15 m	0.00		
		0.10		
Fill	- Orange sand (dry) - No visible asbestos - No odour	0.20	●	TP 3, 0.15-0.25 m Contamination Ranking = 0 P.I.D. = 9.9 ppm
		0.30		
Natural	- Grey (dry) - Basaltic clay - No odour	0.40	●	TP 3, 0.3-0.4 m Contamination Ranking = 0 P.I.D. = 5.9 ppm
		0.50		
	End of test pit	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Test Pit No.: TP 4**

TEST PIT LOG

Description		Depth (metres)	Sample or Test	Description/Rank
		0.00		
Fill	- Grey (dry)			
	- Silty clay	0.10		
	- Contains some sand & gravel		●	TP 4, 0.1-0.2 m
	- No visible asbestos	0.20		Contamination Ranking = 0
	- No odour			P.I.D. = 2.0 ppm
		0.30		
Natural	- Grey (dry)		●	TP 4, 0.3-0.4 m
	- Basaltic clay	0.40		Contamination Ranking = 0
	- No odour			P.I.D. = 3.6 ppm
		0.50		
		0.60		
	End of test pit	0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Test Pit No.: TP 5**

TEST PIT LOG

Description		Depth (metres)	Sample or Test	Description/Rank
	Brick layer on surface	0.00		
Fill	- Orange sand (dry)			
	- Contains minor gravel	0.10		
	- No visible asbestos		●	TP 5, 0.1-0.2 m
	- No odour	0.20		Contamination Ranking = 0
				P.I.D. = 7.1 ppm
		0.30		
Natural	- Grey (dry)		●	TP 5, 0.3-0.4 m
	- Basaltic clay	0.40		Contamination Ranking = 0
	- No odour			P.I.D. = 12.3 ppm
		0.50		
	End of test pit	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

DIOMIDES & ASSOCIATES PTY LTD **Environmental Consultants**	**Project:** 101 - 105 Hope Street, Brunswick, Victoria	**JOB NO:** **DA 1468** **DATE:** **11-May-12** **Method: Excavator** **Test Pit No.: TP 6**

TEST PIT LOG

Description		Depth (metres)	Sample or Test	Description/Rank
		0.00		
Concrete & brick layer 0.25 m		0.10		
		0.20		
Fill	- Orange sand with gravel (dry) - No visible asbestos & no odour	0.30	●	TP 6, 0.25-0.3 m Contamination Ranking = 0 P.I.D. = 8.3 ppm
Natural	- Grey (dry) - Basaltic clay - No odour	0.40 0.50	●	TP 6, 0.4-0.5 m Contamination Ranking = 0 P.I.D. = 4.9 ppm
	End of test pit	0.60		
		0.70		
		0.80		
		0.90		
		1.00		
		1.10		
		1.20		
		1.30		
		1.40		
		1.50		
		1.60		
		1.70		
		1.80		
		1.90		
		2.00		
		2.10		
		2.20		
		2.30		

Contamination Ranking:
0 = No odour or visual evidence of contamination
1 = Slight odour and/or slight visual evidence of contamination
2 = Visual evidence of contamination and/or odour
3 = Obvious visual evidence of contamination and/or strong odour

APPENDIX J

P.I.D. CALIBRATION CERTIFICATE

D&A

DIOMIDES &
ASSOCIATES PTY LTD

ACN 056 657 848
ABN 99 562 502 680

Environmental Consultants
11 Conway Avenue, Donvale VIC 3111
Phone: (03) 9842 2000 Fax: (03) 9842 0322
Web: www.diomides.com.au

CALIBRATION CERTIFICATE FOR PHOTO IONISATION DETECTOR

MAKE: PHOTOVAC

MODEL: 2020PRO

Calibration gas species: **Iso-butylene**;

Calibration gas concentration: **97 ppm**, balance zero air;

Lamp: **10.6 eV**.

This PID has been referenced to **Iso-butylene** so that the concentration is displayed as **97 ppm**, with a default response factor of **1**.
All PID's are initially zero calibrated.

The above detector was calibrated in accordance with manufacturer's specifications.

Date: 11/05/2012

APPENDIX K

SUMMARY OF SOIL SAMPLE

LABORATORY RESULTS

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Cyanide (total)	mg/kg		750	3000	3750	50	2500	10000		< 5				< 5				< 5			
Fluoride	mg/kg					450	10000	40000		120				160				< 100			
pH (1:5 Aqueous extract)	pH Units					>4/<9				9.7				8.5				12			9.5
Sulphate (S)	mg/kg	2000								50				< 10							12
1.1.1.2-Tetrachloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.1-Trichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.2.2-Tetrachloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1.2-Trichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1-Dichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.1-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2.3-Trichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2.4-Trichlorobenzene	mg/kg									< 0.2				< 0.2				< 0.2			
1.2.4-Trimethylbenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dibromoethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
1.2-Dichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.3.5-Trimethylbenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.3-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
1.3-Dichloropropane	mg/kg									< 0.05				< 0.05				< 0.05			
1.4-Dichlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
2-Butanone (MEK)	mg/kg									< 0.05				< 0.05				< 0.05			
2-Propanone (Acetone)	mg/kg									< 0.05				< 0.05				< 0.05			
4-Chlorotoluene	mg/kg									< 0.05				< 0.05				< 0.05			
4-Methyl-2-pentanone (MIBK)	mg/kg									< 0.05				< 0.05				< 0.05			
Allyl chloride	mg/kg									< 0.05				< 0.05				< 0.05			
Bromobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
Bromochloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Bromodichloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Bromoform	mg/kg									< 0.05				< 0.05				< 0.05			
Bromomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Carbon disulfide	mg/kg									< 0.05				< 0.05				< 0.05			
Carbon Tetrachloride	mg/kg									< 0.05				< 0.05				< 0.05			
Chlorobenzene	mg/kg									< 0.05				< 0.05				< 0.05			
Chloroethane	mg/kg									< 0.05				< 0.05				< 0.05			
Chloroform	mg/kg									< 0.05				< 0.05				< 0.05			
Chloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
cis-1.2-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
cis-1.3-Dichloropropene	mg/kg									< 0.05				< 0.05				< 0.05			
Dibromochloromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Dibromomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Dichlorodifluoromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Hexachlorobutadiene	mg/kg						2.8	11		< 0.2				< 0.2				< 0.2			
Iodomethane	mg/kg									< 0.05				< 0.05				< 0.05			
Isopropyl benzene (Cumene)	mg/kg									< 0.05				< 0.05				< 0.05			
Methylene Chloride	mg/kg									< 0.05				< 0.05				< 0.05			
Styrene	mg/kg									< 0.05				< 0.05				< 0.05			
Tetrachloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
trans-1.2-Dichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
trans-1.3-Dichloropropene	mg/kg									< 0.05				< 0.05				< 0.05			
Trichloroethene	mg/kg									< 0.05				< 0.05				< 0.05			
Trichlorofluoromethane	mg/kg									< 0.05				< 0.05				< 0.05			
Vinyl chloride	mg/kg						1.2	4.8		< 0.05				< 0.05				< 0.05			
Chlorinated hydrocarbons[1]	mg/kg					1				ND				ND				ND			
Other chlorinated hydrocarbons[2]	mg/kg						10	50		ND				ND				ND			
Benzene	mg/kg					1	4	16	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Ethylbenzene	mg/kg								50	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylene	mg/kg									< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	mg/kg								130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total m+p-Xylenes	mg/kg									< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes(ortho.meta and para)	mg/kg								25	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Total BETX	mg/kg					7	70	240		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Arsenic	mg/kg	20	100	400	500	20	500	2000		15	< 2	33	2.4	2.4	5.5	6.7	2.8	< 2	2.1	3.4	< 2
Cadmium	mg/kg	3	20	80	100	3	100	400		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.5	1.2	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	mg/kg	50[A]								25	18	12	14	15	8.6	19	24	8.3	13	33	13
Chromium (hexavalent)	mg/kg	1	100	400	500	1	500	2000		< 1				< 1				< 1			

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Copper	mg/kg	100	1000	4000	5000	100	5000	20000		27	< 5	89	< 5	< 5	12	42	5.7	< 5	< 5	19	< 5
Lead	mg/kg	600	300	1200	1500	300	1500	6000		19	16	66	9	8.7	540	31	12	< 5	7.1	21	8.9
Mercury	mg/kg	1	15	60	75	1	75	300		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	mg/kg					40	1000	4000		< 10				< 10				< 10			
Nickel	mg/kg	60	600	2400	3000	60	3000	12000		18	10	20	5.6	< 5	< 5	44	15	< 5	5.7	26	7.9
Selenium	mg/kg					10	50	200		< 2				< 2				< 2			
Silver	mg/kg					10	180	720		< 5				< 5				< 5			
Tin	mg/kg	50[A]				50	500			< 10				< 10				< 10			
Zinc	mg/kg	200	7000	28000	35000	200	35000	140000		14	11	62	6.1	6.7	84	150	12	10	< 5	41	7
4.4'-DDD	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
4.4'-DDE	mg/kg		200	800	1000		50	50		< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
4.4'-DDT	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
a-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Aldrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
b-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Chlordane	mg/kg		50	200	250		4	16		< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
d-BHC	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Dieldrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan I	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan II	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endosulfan sulphate	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endrin	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Endrin aldehyde	mg/kg									< 0.05		< 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									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Heptachlor	mg/kg		10	40	50		1.2	4.8		< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Heptachlor epoxide	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Hexachlorobenzene	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Methoxychlor	mg/kg									< 0.05		< 0.05		< 0.05				< 0.05		< 0.05	
Toxaphene	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aldrin + Dieldrin	mg/kg		10	40	50		1.2	4.8		< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Organochlorine Pesticides[3]	mg/kg					1				ND		ND		ND				ND		ND	
Other organochlorine pesticides[4]	mg/kg						10	50		ND		ND		ND				ND		ND	
2.4.5-Trichlorophenol	mg/kg									< 1				< 1				< 1			
2.4.6-Trichlorophenol	mg/kg									< 1				< 1				< 1			
2.4-Dichlorophenol	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			
4-Chloro-3-methylphenol	mg/kg									< 1				< 1				< 1			
Pentachlorophenol	mg/kg									< 1				< 1				< 1			
Tetrachlorophenols - Total	mg/kg									< 5				< 5				< 5			
Total Halogenated Phenol	mg/kg					1	10	320		< 1				< 1				< 1			
2.4-Dimethylphenol	mg/kg									< 0.5				< 0.5				< 0.5			
2.4-Dinitrophenol	mg/kg									< 5				< 5				< 5			
2-Cyclohexyl-4.6-dinitrophenol	mg/kg									< 20				< 20				< 20			
2-Methyl-4.6-dinitrophenol	mg/kg									< 5				< 5				< 5			
2-Methylphenol (o-Cresol)	mg/kg									< 0.2				< 0.2				< 0.2			
2-Nitrophenol	mg/kg									< 1				< 1				< 1			
3&4-Methylphenol (m&p-Cresol)	mg/kg									< 0.4				< 0.4				< 0.4			
4-Nitrophenol	mg/kg									< 5				< 5				< 5			
Dinoseb	mg/kg									< 20				< 20				< 20			
Phenol	mg/kg									< 0.5				< 0.5				< 0.5			
Total Non-Halogenated Phenol	mg/kg					60	560	2200		< 20				< 20				< 20			
Aroclor-1016	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1221	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1232	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1242	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1248	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1254	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Aroclor-1260	mg/kg									< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Total PCB	mg/kg		10	40	50	2				< 0.1		< 0.1		< 0.1				< 0.1		< 0.1	
Acenaphthene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

SUMMARY SOIL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4	TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4	TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09450	M12-My09451	M12-My09452	M12-My09453	M12-My09454	M12-My09455	M12-My09456	M12-My09457	M12-My09458	M12-My09459	M12-My09460	M12-My09461
Analyte	Unit									Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural	Fill	Natural
Benz(a)anthracene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	mg/kg		1	4	5	1	5	20		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 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	< 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	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 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	< 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	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	mg/kg		20	80	100	20	100	400		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C9	mg/kg					100	650	2600	65	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C10-C14	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C15-C28	mg/kg									< 50	< 50	72	< 50	< 50	< 50	51	< 50	< 50	< 50	< 50	< 50
TRH C29-C36	mg/kg									< 50	< 50	56	< 50	< 50	< 50	100	< 50	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	mg/kg					1000	10000	40000	1000	< 50	< 50	130	< 50	< 50	< 50	150	< 50	< 50	< 50	< 50	< 50
TRH C6-C10	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)	mg/kg									< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Naphthalene	mg/kg									< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRH >C10-C16	mg/kg									< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)	mg/kg									< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
TRH >C16-C34	mg/kg									< 100	< 100	120	< 100	< 100	< 100	130	< 100	< 100	< 100	< 100	< 100
TRH >C34-C40	mg/kg									< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100

SUMMARY SOIL QUALITY CONTROL LABORATORY RESULTS (May 11, 2012)
for 101 - 105 Hope Street, Brunswick (DA1468)

		Adopted Criteria								MGT	MGT	% RPD	Envirolab	% RPD	MGT	MGT
DIOMIDES		NEPM	NEPM	NEPM	NEPM	EPA	EPA	EPA	NSW	BH2 0.3-0.4	BLIND	BH2 0.3-0.4	SPLIT	BH2 0.3-0.4	FIELD BLANK	RINSATE
BRUNSWICK DA 1468		EIL	HIL A	HIL D	HIL F	Fill	Cat C	Cat B	EPA	M12-My09453	M12-My09462	vs BLIND	73186-1	vs SPLIT	M12-My09463	M12-My09464
Analyte	Unit									Natural	Natural		Natural			
Benzene	mg/kg					1	4	16	1	< 0.05	< 0.05	0	< 0.2	n/a		
Ethylbenzene	mg/kg								50	< 0.05	< 0.05	0	< 1	n/a		
o-Xylene	mg/kg									< 0.05	< 0.05	0	< 1	n/a		
Toluene	mg/kg								130	< 0.05	< 0.05	0	< 0.5	n/a		
Total m+p-Xylenes	mg/kg									< 0.1	< 0.1	0	< 2	n/a		
Xylenes(ortho.meta and para)	mg/kg								25	< 0.15	< 0.15	0	< 3	n/a		
Total BETX	mg/kg					7	70	240		< 0.3	< 0.3	0	< 4.7	n/a		
Arsenic	mg/kg	20	100	400	500	20	500	2000		2.4	2.7	-11.8	< 4*	18.2		
Cadmium	mg/kg	3	20	80	100	3	100	400		< 0.4	< 0.4	0	< 0.5	n/a		
Chromium	mg/kg	50[A]								14	12	15.4	11	24.0		
Chromium (hexavalent)	mg/kg	1	100	400	500	1	500	2000								
Copper	mg/kg	100	1000	4000	5000	100	5000	20000		< 5*	6.3	-86.4	7	-94.7		
Lead	mg/kg	600	300	1200	1500	300	1500	6000		9	12	-28.6	14	-43.5		
Mercury	mg/kg	1	15	60	75	1	75	300		< 0.1	< 0.1	0	< 0.1	0		
Molybdenum	mg/kg					40	1000	4000								
Nickel	mg/kg	60	600	2400	3000	60	3000	12000		5.6	5.3	5.5	5	11.3		
Selenium	mg/kg					10	50	200								
Silver	mg/kg					10	180	720								
Tin	mg/kg	50[A]				50	500									
Zinc	mg/kg	200	7000	28000	35000	200	35000	140000		6.1	7.3	-17.9	6	1.7		
Acenaphthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Acenaphthylene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benz(a)anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(a)pyrene	mg/kg		1	4	5	1	5	20		< 0.5	< 0.5	0	< 0.05	n/a		
Benzo(b)fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(g.h.i)perylene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Benzo(k)fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Chrysene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Dibenz(a.h)anthracene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Fluoranthene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Fluorene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Indeno(1.2.3-cd)pyrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Naphthalene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Phenanthrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Pyrene	mg/kg									< 0.5	< 0.5	0	< 0.1	n/a		
Total PAH	mg/kg		20	80	100	20	100	400		< 0.5	< 0.5	0	< 0.1	n/a		
TRH C6-C9	mg/kg					100	650	2600	65	< 20	< 20	0	< 25	n/a		
TRH C10-C14	mg/kg									< 20	< 20	0	< 50	n/a		
TRH C15-C28	mg/kg									< 50	< 50	0	< 100	n/a		
TRH C29-C36	mg/kg									< 50	< 50	0	< 100	n/a		
TRH C10-36 (Total)	mg/kg					1000	10000	40000	1000	< 50	< 50	0	< 250	n/a		
TRH C6-C10	mg/kg									< 20	< 20	0				
TRH C6-C10 less BTEX (F1)	mg/kg									< 20	< 20	0				
Naphthalene	mg/kg									< 0.5	< 0.5	0				
TRH >C10-C16	mg/kg									< 50	< 50	0				
TRH >C10-C16 less Naphthalene (F2)	mg/kg									< 50	< 50	0				
TRH >C16-C34	mg/kg									< 100	< 100	0				
TRH >C34-C40	mg/kg									< 100	< 100	0				
Benzene	mg/L														< 0.05	
Ethylbenzene	mg/L														< 0.05	
o-Xylene	mg/L														< 0.05	
Toluene	mg/L														< 0.05	
Total m+p-Xylenes	mg/L														< 0.1	
Xylenes(ortho.meta and para)	mg/L														< 0.15	
Total BETX	mg/L														< 0.3	
TRH C6-C9	mg/L														< 20	
TRH C10-C14	mg/L														< 20	
TRH C15-C28	mg/L														< 50	
TRH C29-C36	mg/L														< 50	
TRH C10-36 (Total)	mg/L														< 50	
TRH C6-C10	mg/L														< 20	
TRH C6-C10 less BTEX (F1)	mg/L														< 20	
Naphthalene	mg/L														< 0.5	
TRH >C10-C16	mg/L														< 50	
TRH >C10-C16 less Naphthalene (F2)	mg/L														< 50	
TRH >C16-C34	mg/L														< 100	
TRH >C34-C40	mg/L														< 100	
Arsenic	mg/L															< 0.001
Cadmium	mg/L															< 0.0002
Chromium	mg/L															< 0.001
Copper	mg/L															< 0.001
Lead	mg/L															< 0.001
Mercury	mg/L															< 0.0001
Nickel	mg/L															< 0.001
Zinc	mg/L															< 0.001

NOTES:

EIL refers to Ecological Investigation Level as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL A refers to the Health Investigation Level "A" which applies for Standard residential with garden/accessible soil, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL D refers to the Health Investigation Level "D" which applies for residential with minimal opportunities for soil access: includes dwellings with fully and permanently paved yard space such as high-rise apartments and flats, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL E refers to the Health Investigation Level "E" which applies for parks, recreational open space and playing fields: includes secondary schools, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

HIL F refers to the Health Investigation Level "F" which applies for Commercial/Industrial: includes premises such as shops and offices as well as factories and industrial sites, as referred to the National Environment Protection (Assessment of Site Contamination) Measure 1999.

EPA NSW refers to the threshold concentrations for sensitive land use - soils (Table 3), as referred to the NSW EPA Guidelines for Assessing Service Station Sites, 1994.

EPA FILL refers to fill material upper limits from EPA Industrial Waste Resource Guidelines, Publication IWRG621 - June 2009 titled "Soil Hazard Categorisation and Management", and specifically Table 2 titled, "Soil Hazard Categorisation Thresholds."

EPA CAT C refers to Category C contaminated soil upper limits from EPA Industrial Waste Resource Guidelines, Publication IWRG621 - June 2009 titled "Soil Hazard Categorisation and Management", and specifically Table 2 titled, "Soil Hazard Categorisation Thresholds."

EPA CAT B refers to Category B contaminated soil upper limits from EPA Industrial Waste Resource Guidelines, Publication IWRG621 - June 2009 titled "Soil Hazard Categorisation and Management", and specifically Table 2 titled, "Soil Hazard Categorisation Thresholds."

1 - Total sum of carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-diclorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene, dichloromethane (methylene chloride), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride and hexachlorobutadiene.

2 - Total sum of carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-diclorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene, dichloromethane (methylene chloride), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and trichloroethene.

3 - Total sum of aldrin, hexachlorobenzene, alpha BHC, beta BHC, gamma BHC (lindane), delta BHC, chlordane, DDT, DDD, DDE, dieldrin, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor and endosulfan (includes endosulfan I, endosulfan II and endosulfan sulphate).

4 - Total sum of hexachlorobenzene (HCB), alpha BHC, beta BHC, gamma BHC (lindane), delta BHC, chlordane, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor, and endosulfan (includes endosulfan I, endosulfan II and endosulfan sulphate).

5 - Total sum of 4-chloro-3-methylphenol, 2-chlorophenol, 2,4-dichlorophenol, 2,6-dichlorophenol, pentachlorophenol, 2,3,4,5-tetrachlorophenol, 2,3,4,6-tetrachlorophenol, 2,3,5,6-tetrachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.

6 - Total sum of phenol, 2-methylphenol (o-cresol), 3-methylphenol (m-cresol), 4-methylphenol (p-cresol), 2,4-dimethylphenol, 2,4-dinitrophenol, 2-methyl-4,6-dinitrophenol, 2-nitrophenol, 4-nitrophenol, 2-cyclohexyl-4,6-dinitrophenol, and dinoseb.

A - The value obtained for Antimony, Chromium and Tin have been taken from Table 2 Environmental Soil Quality Guidelines from the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, ANZECC/NHMRC, January 1992.

ND indicates Not Detected

Shaded cells indicate that the concentration is above one or more of the adopted criteria.

n/a indicates Not Applicable for RPD calculation since both concentrations are below their respective (different) method detection limits

*** (asterisk) indicates that half the method detection limit has been used in the RPD calculation**

All RPDs have been calculated in accordance with Australian Standards AS 4482.1 – 2005: Guide to the sampling and investigation of potentially contaminated soil.

APPENDIX L

LABORATORY REPORTS FOR SOIL SAMPLES

mgt LabMark ENVIRONMENTAL LABORATORIES

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Diomides & Associates Pty. Ltd.
11 Conway Ave
Donvale
Victoria 3111

Attention:Costa Diomides

Report	**337011-S**
Client Reference	BRUNSWICK DA 1468
Received Date	May 11, 2012

Client Sample ID			**BH1 0.15-0.25**	**BH1 0.3-0.4**	**BH2 0.1-0.2**	**BH2 0.3-0.4**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09450**	**M12-My09451**	**M12-My09452**	**M12-My09453**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	72	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	56	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	130	< 50
BTEX						
Benzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toluene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Total m+p-Xylenes	0.10	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes(ortho.meta and para)	0.15	mg/kg	-	< 0.15	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	-	100	99	94
Volatile Organics						
1.2.4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	-	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	-	-
1.1-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
1.1.1-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.1.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dibromoethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.3-Trichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.3.5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	-	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	-	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	-	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	-	-

Client Sample ID			BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			M12-My09450	M12-My09451	M12-My09452	M12-My09453
Date Sampled			May 11, 2012	May 11, 2012	May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit				
Allyl chloride	0.05	mg/kg	< 0.05	-	-	-
Benzene	0.05	mg/kg	< 0.05	-	-	-
Bromobenzene	0.05	mg/kg	< 0.05	-	-	-
Bromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromodichloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromoform	0.05	mg/kg	< 0.05	-	-	-
Bromomethane	0.05	mg/kg	< 0.05	-	-	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	-	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	-	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Chloroethane	0.05	mg/kg	< 0.05	-	-	-
Chloroform	0.05	mg/kg	< 0.05	-	-	-
Chloromethane	0.05	mg/kg	< 0.05	-	-	-
cis-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
cis-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Dibromomethane	0.05	mg/kg	< 0.05	-	-	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	-	-
Ethylbenzene	0.05	mg/kg	< 0.05	-	-	-
Iodomethane	0.05	mg/kg	< 0.05	-	-	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	-	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	-	-
o-Xylene	0.05	mg/kg	< 0.05	-	-	-
Styrene	0.05	mg/kg	< 0.05	-	-	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	-	-
Toluene	0.05	mg/kg	< 0.05	-	-	-
Total m+p-Xylenes	0.10	mg/kg	< 0.1	-	-	-
trans-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
trans-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Trichloroethene	0.05	mg/kg	< 0.05	-	-	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	-	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	-	-
Xylenes(ortho.meta and para)	0.15	mg/kg	< 0.15	-	-	-
Fluorobenzene (surr.)	1	%	68	-	-	-
4-Bromofluorobenzene (surr.)	1	%	80	-	-	-
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	120	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09450**	**M12-My09451**	**M12-My09452**	**M12-My09453**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
p-Terphenyl-d14 (surr.)	1	%	137	76	93	88
2-Fluorobiphenyl (surr.)	1	%	71	51	66	58
Organochlorine Pesticides						
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlordane	0.1	mg/kg	< 0.1	-	< 0.1	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	97	-	135	-
Tetrachloro-m-xylene (surr.)	1	%	95	-	101	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	97	-	135	-
Tetrachloro-m-xylene (surr.)	1	%	95	-	101	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	-	-

Client Sample ID			BH1 0.15-0.25	BH1 0.3-0.4	BH2 0.1-0.2	BH2 0.3-0.4
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09450**	**M12-My09451**	**M12-My09452**	**M12-My09453**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
2.4.5-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.4.6-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	-	-
Pentachlorophenol	1.0	mg/kg	< 1	-	-	-
Tetrachlorophenols - Total	5.0	mg/kg	< 5	-	-	-
Total Halogenated Phenol	1	mg/kg	< 1	-	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	-	-	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	-	-	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	-	-
2-Nitrophenol	1.0	mg/kg	< 1	-	-	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	-	-	-
2.4-Dinitrophenol	5	mg/kg	< 5	-	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	-	-
4-Nitrophenol	5	mg/kg	< 5	-	-	-
Dinoseb	20	mg/kg	< 20	-	-	-
Phenol	0.5	mg/kg	< 0.5	-	-	-
Total Non-Halogenated Phenol	20	mg/kg	< 20	-	-	-
Phenol-d6 (surr.)	1	%	94	-	-	-
Chromium (hexavalent)	1	mg/kg	< 1	-	-	-
Cyanide (total)	5	mg/kg	< 5	-	-	-
Fluoride	100	mg/kg	120	-	-	-
pH (1:5 Aqueous extract)	0.1	units	9.7	-	-	-
Sulphate (S)	10	mg/kg	50	-	-	-
% Moisture	0.1	%	14	19	20	17
Heavy Metals						
Arsenic	2	mg/kg	15	< 2	33	2.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	25	18	12	14
Copper	5	mg/kg	27	< 5	89	< 5
Lead	5	mg/kg	19	16	66	9.0
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	-	-
Nickel	5	mg/kg	18	10	20	5.6
Selenium	2	mg/kg	< 2	-	-	-
Silver	5	mg/kg	< 5	-	-	-
Tin	10	mg/kg	< 10	-	-	-
Zinc	5	mg/kg	14	11	62	6.1

Client Sample ID			TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09454**	**M12-My09455**	**M12-My09456**	**M12-My09457**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	51	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	100	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	150	< 50
BTEX						
Benzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toluene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Total m+p-Xylenes	0.10	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes(ortho.meta and para)	0.15	mg/kg	-	< 0.15	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	-	96	78	98
Volatile Organics						
1.2.4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	-	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	-	-
1.1-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
1.1.1-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.1.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dibromoethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.3-Trichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.3.5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	-	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	-	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	-	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	-	-
Allyl chloride	0.05	mg/kg	< 0.05	-	-	-
Benzene	0.05	mg/kg	< 0.05	-	-	-
Bromobenzene	0.05	mg/kg	< 0.05	-	-	-
Bromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromodichloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromoform	0.05	mg/kg	< 0.05	-	-	-
Bromomethane	0.05	mg/kg	< 0.05	-	-	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	-	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	-	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Chloroethane	0.05	mg/kg	< 0.05	-	-	-
Chloroform	0.05	mg/kg	< 0.05	-	-	-

Client Sample ID			TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			M12-My09454	M12-My09455	M12-My09456	M12-My09457
Date Sampled			May 11, 2012	May 11, 2012	May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit				
Chloromethane	0.05	mg/kg	< 0.05	-	-	-
cis-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
cis-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Dibromomethane	0.05	mg/kg	< 0.05	-	-	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	-	-
Ethylbenzene	0.05	mg/kg	< 0.05	-	-	-
Iodomethane	0.05	mg/kg	< 0.05	-	-	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	-	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	-	-
o-Xylene	0.05	mg/kg	< 0.05	-	-	-
Styrene	0.05	mg/kg	< 0.05	-	-	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	-	-
Toluene	0.05	mg/kg	< 0.05	-	-	-
Total m+p-Xylenes	0.10	mg/kg	< 0.1	-	-	-
trans-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
trans-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Trichloroethene	0.05	mg/kg	< 0.05	-	-	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	-	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	-	-
Xylenes(ortho.meta and para)	0.15	mg/kg	< 0.15	-	-	-
Fluorobenzene (surr.)	1	%	71	-	-	-
4-Bromofluorobenzene (surr.)	1	%	78	-	-	-
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	130	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
p-Terphenyl-d14 (surr.)	1	%	77	90	97	91

Client Sample ID			TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			M12-My09454	M12-My09455	M12-My09456	M12-My09457
Date Sampled			May 11, 2012	May 11, 2012	May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit				
2-Fluorobiphenyl (surr.)	1	%	51	56	51	63
Organochlorine Pesticides						
4.4'-DDD	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	-	-
a-BHC	0.05	mg/kg	< 0.05	-	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-	-
b-BHC	0.05	mg/kg	< 0.05	-	-	-
Chlordane	0.1	mg/kg	< 0.1	-	-	-
d-BHC	0.05	mg/kg	< 0.05	-	-	-
Dieldrin	0.05	mg/kg	< 0.05	-	-	-
Endosulfan I	0.05	mg/kg	< 0.05	-	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-	-
Endrin	0.05	mg/kg	< 0.05	-	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Methoxychlor	0.05	mg/kg	< 0.05	-	-	-
Toxaphene	0.1	mg/kg	< 0.1	-	-	-
Dibutylchlorendate (surr.)	1	%	71	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	-	-
Total PCB	0.1	mg/kg	< 0.1	-	-	-
Dibutylchlorendate (surr.)	1	%	71	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	99	-	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	-	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
2.4.5-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.4.6-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	-	-
Pentachlorophenol	1.0	mg/kg	< 1	-	-	-
Tetrachlorophenols - Total	5.0	mg/kg	< 5	-	-	-
Total Halogenated Phenol	1	mg/kg	< 1	-	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	-	-	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	-	-	-

Client Sample ID			TP3 0.15-0.25	TP3 0.3-0.4	TP4 0.1-0.2	TP4 0.3-0.4
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09454**	**M12-My09455**	**M12-My09456**	**M12-My09457**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	-	-
2-Nitrophenol	1.0	mg/kg	< 1	-	-	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	-	-	-
2.4-Dinitrophenol	5	mg/kg	< 5	-	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	-	-
4-Nitrophenol	5	mg/kg	< 5	-	-	-
Dinoseb	20	mg/kg	< 20	-	-	-
Phenol	0.5	mg/kg	< 0.5	-	-	-
Total Non-Halogenated Phenol	20	mg/kg	< 20	-	-	-
Phenol-d6 (surr.)	1	%	67	-	-	-
Chromium (hexavalent)	1	mg/kg	< 1	-	-	-
Cyanide (total)	5	mg/kg	< 5	-	-	-
Fluoride	100	mg/kg	160	-	-	-
pH (1:5 Aqueous extract)	0.1	units	8.5	-	-	-
Sulphate (S)	10	mg/kg	< 10	-	-	-
% Moisture	0.1	%	17	17	14	25
Heavy Metals						
Arsenic	2	mg/kg	2.4	5.5	6.7	2.8
Cadmium	0.4	mg/kg	< 0.4	0.5	1.2	< 0.4
Chromium	5	mg/kg	15	8.6	19	24
Copper	5	mg/kg	< 5	12	42	5.7
Lead	5	mg/kg	8.7	540	31	12
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	-	-
Nickel	5	mg/kg	< 5	< 5	44	15
Selenium	2	mg/kg	< 2	-	-	-
Silver	5	mg/kg	< 5	-	-	-
Tin	10	mg/kg	< 10	-	-	-
Zinc	5	mg/kg	6.7	84	150	12

Client Sample ID			TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09458**	**M12-My09459**	**M12-My09460**	**M12-My09461**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toluene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Total m+p-Xylenes	0.10	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes(ortho.meta and para)	0.15	mg/kg	-	< 0.15	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	-	122	94	72
Volatile Organics						
1.2.4-Trichlorobenzene	0.2	mg/kg	< 0.2	-	-	-
Hexachlorobutadiene	0.2	mg/kg	< 0.2	-	-	-
1.1-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
1.1.1-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.1.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2-Trichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.1.2.2-Tetrachloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dibromoethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloroethane	0.05	mg/kg	< 0.05	-	-	-
1.2-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.3-Trichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.2.4-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
1.3-Dichloropropane	0.05	mg/kg	< 0.05	-	-	-
1.3.5-Trimethylbenzene	0.05	mg/kg	< 0.05	-	-	-
1.4-Dichlorobenzene	0.05	mg/kg	< 0.05	-	-	-
2-Butanone (MEK)	0.05	mg/kg	< 0.05	-	-	-
2-Propanone (Acetone)	0.05	mg/kg	< 0.05	-	-	-
4-Chlorotoluene	0.05	mg/kg	< 0.05	-	-	-
4-Methyl-2-pentanone (MIBK)	0.05	mg/kg	< 0.05	-	-	-
Allyl chloride	0.05	mg/kg	< 0.05	-	-	-
Benzene	0.05	mg/kg	< 0.05	-	-	-
Bromobenzene	0.05	mg/kg	< 0.05	-	-	-
Bromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromodichloromethane	0.05	mg/kg	< 0.05	-	-	-
Bromoform	0.05	mg/kg	< 0.05	-	-	-
Bromomethane	0.05	mg/kg	< 0.05	-	-	-
Carbon disulfide	0.05	mg/kg	< 0.05	-	-	-
Carbon Tetrachloride	0.05	mg/kg	< 0.05	-	-	-
Chlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Chloroethane	0.05	mg/kg	< 0.05	-	-	-
Chloroform	0.05	mg/kg	< 0.05	-	-	-

Client Sample ID			TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			M12-My09458	M12-My09459	M12-My09460	M12-My09461
Date Sampled			May 11, 2012	May 11, 2012	May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit				
Chloromethane	0.05	mg/kg	< 0.05	-	-	-
cis-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
cis-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Dibromochloromethane	0.05	mg/kg	< 0.05	-	-	-
Dibromomethane	0.05	mg/kg	< 0.05	-	-	-
Dichlorodifluoromethane	0.05	mg/kg	< 0.05	-	-	-
Ethylbenzene	0.05	mg/kg	< 0.05	-	-	-
Iodomethane	0.05	mg/kg	< 0.05	-	-	-
Isopropyl benzene (Cumene)	0.05	mg/kg	< 0.05	-	-	-
Methylene Chloride	0.05	mg/kg	< 0.05	-	-	-
o-Xylene	0.05	mg/kg	< 0.05	-	-	-
Styrene	0.05	mg/kg	< 0.05	-	-	-
Tetrachloroethene	0.05	mg/kg	< 0.05	-	-	-
Toluene	0.05	mg/kg	< 0.05	-	-	-
Total m+p-Xylenes	0.10	mg/kg	< 0.1	-	-	-
trans-1.2-Dichloroethene	0.05	mg/kg	< 0.05	-	-	-
trans-1.3-Dichloropropene	0.05	mg/kg	< 0.05	-	-	-
Trichloroethene	0.05	mg/kg	< 0.05	-	-	-
Trichlorofluoromethane	0.05	mg/kg	< 0.05	-	-	-
Vinyl chloride	0.05	mg/kg	< 0.05	-	-	-
Xylenes(ortho.meta and para)	0.15	mg/kg	< 0.15	-	-	-
Fluorobenzene (surr.)	1	%	66	-	-	-
4-Bromofluorobenzene (surr.)	1	%	77	-	-	-
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
p-Terphenyl-d14 (surr.)	1	%	96	84	99	112

Client Sample ID			TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			M12-My09458	M12-My09459	M12-My09460	M12-My09461
Date Sampled			May 11, 2012	May 11, 2012	May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit				
2-Fluorobiphenyl (surr.)	1	%	76	57	64	53
Organochlorine Pesticides						
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Chlordane	0.1	mg/kg	< 0.1	-	< 0.1	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	60	-	69	-
Tetrachloro-m-xylene (surr.)	1	%	101	-	106	-
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1232	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1242	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1248	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1254	0.1	mg/kg	< 0.1	-	< 0.1	-
Aroclor-1260	0.1	mg/kg	< 0.1	-	< 0.1	-
Total PCB	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	60	-	69	-
Tetrachloro-m-xylene (surr.)	1	%	101	-	106	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	-	-	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
2.4.5-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.4.6-Trichlorophenol	1.0	mg/kg	< 1	-	-	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	-	-	-
4-Chloro-3-methylphenol	1.0	mg/kg	< 1	-	-	-
Pentachlorophenol	1.0	mg/kg	< 1	-	-	-
Tetrachlorophenols - Total	5.0	mg/kg	< 5	-	-	-
Total Halogenated Phenol	1	mg/kg	< 1	-	-	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	-	-	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	-	-	-

Client Sample ID			TP5 0.1-02	TP5 0.3-0.4	TP6 0.25-0.3	TP6 0.4-0.5
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09458**	**M12-My09459**	**M12-My09460**	**M12-My09461**
Date Sampled			**May 11, 2012**	**May 11, 2012**	**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit				
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	-	-
2-Nitrophenol	1.0	mg/kg	< 1	-	-	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	-	-	-
2.4-Dinitrophenol	5	mg/kg	< 5	-	-	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	-	-
4-Nitrophenol	5	mg/kg	< 5	-	-	-
Dinoseb	20	mg/kg	< 20	-	-	-
Phenol	0.5	mg/kg	< 0.5	-	-	-
Total Non-Halogenated Phenol	20	mg/kg	< 20	-	-	-
Phenol-d6 (surr.)	1	%	25	-	-	-
Chromium (hexavalent)	1	mg/kg	< 1	-	-	-
Cyanide (total)	5	mg/kg	< 5	-	-	-
Fluoride	100	mg/kg	< 100	-	-	-
pH (1:5 Aqueous extract)	0.1	units	12	-	-	9.5
Sulphate (S)	10	mg/kg	-	-	-	12
% Moisture	0.1	%	14	19	17	19
Heavy Metals						
Arsenic	2	mg/kg	< 2	2.1	3.4	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.3	13	33	13
Copper	5	mg/kg	< 5	< 5	19	< 5
Lead	5	mg/kg	< 5	7.1	21	8.9
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	10	mg/kg	< 10	-	-	-
Nickel	5	mg/kg	< 5	5.7	26	7.9
Selenium	2	mg/kg	< 2	-	-	-
Silver	5	mg/kg	< 5	-	-	-
Tin	10	mg/kg	< 10	-	-	-
Zinc	5	mg/kg	10.0	< 5	41	7.0

Client Sample ID			BLIND	FIELD BLANK
Sample Matrix			Soil	Soil
mgt-LabMark Sample No.			M12-My09462	M12-My09463
Date Sampled			May 11, 2012	May 11, 2012
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.05	mg/kg	< 0.05	< 0.05
Toluene	0.05	mg/kg	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	< 0.05	< 0.05
Total m+p-Xylenes	0.10	mg/kg	< 0.1	< 0.1
Xylenes(ortho.meta and para)	0.15	mg/kg	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	107	84
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.5	mg/kg	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-
Total PAH	0.5	mg/kg	< 0.5	-
p-Terphenyl-d14 (surr.)	1	%	117	-
2-Fluorobiphenyl (surr.)	1	%	57	-
% Moisture	0.1	%	16	2.1
Heavy Metals				
Arsenic	2	mg/kg	2.7	-
Cadmium	0.4	mg/kg	< 0.4	-
Chromium	5	mg/kg	12	-

Client Sample ID			**BLIND**	**FIELD BLANK**
Sample Matrix			**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-My09462**	**M12-My09463**
Date Sampled			**May 11, 2012**	**May 11, 2012**
Test/Reference	LOR	Unit		
Copper	5	mg/kg	6.3	-
Lead	5	mg/kg	12	-
Mercury	0.1	mg/kg	< 0.1	-
Nickel	5	mg/kg	5.3	-
Zinc	5	mg/kg	7.3	-

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Holding Time
mgt-LabMark Suite 7			
Polycyclic Aromatic Hydrocarbons - Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons	Melbourne	May 15, 2012	14 Day
BTEX - Method: USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons	Melbourne	May 15, 2012	14 Day
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - MGT 100A	Melbourne	May 16, 2012	14 Day
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * - Method: LM-LTM-ORG2010	Melbourne	May 15, 2012	14 Day
Metals M8 - Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury	Melbourne	May 15, 2012	28 Day
Vic EPA IWRG 621 (Solids)			
IWRG 621 Metals : Metals M12 - Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury	Melbourne	May 15, 2012	28 Day
Phenols (Halogenated) - Method: USEPA 8270 Phenols	Melbourne	May 15, 2012	14 Day
Polychlorinated Biphenyls - Method: USEPA 8082 Polychlorinated Biphenyls	Melbourne	May 15, 2012	14 Day
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	May 15, 2012	14 Day
Fluoride - Method: NEPC 404 (Fusion followed by ISE)	Melbourne	May 15, 2012	28 Day
Phenols (non-Halogenated) - Method: USEPA 8270 Phenols	Melbourne	May 15, 2012	14 Day
Organochlorine Pesticides - Method: USEPA 8081 Organochlorine Pesticides	Melbourne	May 15, 2012	14 Day
pH (1:5 Aqueous extract) - Method: APHA 4500 pH by Direct Measurement	Melbourne	May 15, 2012	7 Day
Cyanide (total) - Method: USEPA 9010 Cyanide	Melbourne	May 15, 2012	14 Day
Chromium (hexavalent) - Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)	Melbourne	May 15, 2012	28 Day
Sulphate (S) - Method: APHA 4500-SO4 (SO4 by Discrete Analyser)	Melbourne	May 15, 2012	28 Day
% Moisture - Method: Method 102 - ANZECC - % Moisture	Melbourne	May 15, 2012	14 Day

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Diomides & Associates Pty. Ltd.
Address: 11 Conway Ave
Donvale
Victoria 3111

Order No.:
Report #: 337011
Phone: 9842 2000
Fax: 9842 0322

Received: May 11, 2012 5:34 PM
Due: May 22, 2012 4:00 PM
Priority: 5 Day
Contact name: Costa Diomides

Client Job No.: BRUNSWICK DA 1468

mgt-LabMark Client Manager: Natalie Krasselt

Sample Detail					% Moisture	pH (1:5 Aqueous extract)	Sulphate (S)	Metals M8 filtered	mgt-LabMark Suite 13	Vic EPA IWRG 621 (Solids)	mgt-LabMark Suite 1	mgt-LabMark Suite 7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217												
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.15-0.25	May 11, 2012		Soil	M12-My09450	X		X			X		
BH1 0.3-0.4	May 11, 2012		Soil	M12-My09451	X							X
BH2 0.1-0.2	May 11, 2012		Soil	M12-My09452	X				X			X
BH2 0.3-0.4	May 11, 2012		Soil	M12-My09453	X							X
TP3 0.15-0.25	May 11, 2012		Soil	M12-My09454	X		X			X		
TP3 0.3-0.4	May 11, 2012		Soil	M12-My09455	X							X
TP4 0.1-0.2	May 11, 2012		Soil	M12-My09456	X							X
TP4 0.3-0.4	May 11, 2012		Soil	M12-My09457	X							X
TP5 0.1-02	May 11, 2012		Soil	M12-My09458	X					X		
TP5 0.3-0.4	May 11, 2012		Soil	M12-My09459	X							X
TP6 0.25-0.3	May 11, 2012		Soil	M12-My09460	X				X			X

mgt LabMark ENVIRONMENTAL LABORATORIES

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Sample Detail					% Moisture	pH (1:5 Aqueous extract)	Sulphate (S)	Metals M8 filtered	mgt-LabMark Suite 13	Vic EPA IWRG 621 (Solids)	mgt-LabMark Suite 1	mgt-LabMark Suite 7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217												
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
TP6 0.4-0.5	May 11, 2012		Soil	M12-My09461	X	X	X					X
BLIND	May 11, 2012		Soil	M12-My09462	X							X
FIELD BLANK	May 11, 2012		Soil	M12-My09463	X						X	
RINSATE	May 11, 2012		Soil	M12-My09464	X			X				

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis.
7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001)

For samples received on the last day of holding time, notification of testing requirements should have been received at least

6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as an RPD

UNITS

mg/kg:milligrams per Kilogram

µg/L:micrograms per litre

ppb: Parts per billion

org/100mL: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/L:milligrams per litre

ppm: Parts per million

%:Percentage

NTU: Nephelometric Turbidity Units

TERMS

Dry:	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR:	Limit Of Reporting.
SPIKE:	Addition of the analyte to the sample and reported as percentage recovery.
RPD:	Relative Percent Difference between two Duplicate pieces of analysis.
LCS:	Laboratory Control Sample - reported as percent recovery.
CRM:	Certified Reference Material - reported as percent recovery.
Method Blank:	In the case of solid samples these are performed on laboratory certified clean sands.
	In the case of water samples these are performed on de-ionised water.
Surr - Surrogate:	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate:	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate:	A second piece of analysis from a sample outside of the client's batch of samples but run within the laboratory batch of analysis.
Batch SPIKE:	Spike recovery reported on a sample from outside of the client's batch of samples but run within the laboratory batch of analysis.
USEPA:	U.S Environmental Protection Agency
APHA:	American Public Health Association
ASLP:	Australian Standard Leaching Procedure (AS4439.3)
TCLP:	Toxicity Characteristic Leaching Procedure
COC:	Chain Of Custody
SRA:	Sample Receipt Advice
CP:	Client Parent - QC was performed on samples pertaining to this report
NCP:	Non-Client Parent - QC was performed on samples not pertaining to this report, however QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample>
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data below the LOR with a positive RPD - eg: LOR 0.1, Result A = <0.1 (raw data is 0.02) & Result B = <0.1 (raw data is 0.03) resulting in a RPD of 40% calculated from the raw data.

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons							
Benzene	mg/kg	< 0.05			0.05	Pass	
Toluene	mg/kg	< 0.05			0.05	Pass	
Ethylbenzene	mg/kg	< 0.05			0.05	Pass	
o-Xylene	mg/kg	< 0.05			0.05	Pass	
Total m+p-Xylenes	mg/kg	< 0.1			0.10	Pass	
Xylenes(ortho.meta and para)	mg/kg	< 0.15			0.15	Pass	
Method Blank							
Volatile Organics USEPA 8260 - MGT 350A Volatile Organics by GCMS							
1.2.4-Trichlorobenzene	mg/kg	< 0.2			0.2	Pass	
Hexachlorobutadiene	mg/kg	< 0.2			0.2	Pass	
1.1-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.05			0.05	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dibromoethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2-Dichloroethane	mg/kg	< 0.05			0.05	Pass	
1.2-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.05			0.05	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.3-Dichloropropane	mg/kg	< 0.05			0.05	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.05			0.05	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.05			0.05	Pass	
2-Butanone (MEK)	mg/kg	< 0.05			0.05	Pass	
2-Propanone (Acetone)	mg/kg	< 0.05			0.05	Pass	
4-Chlorotoluene	mg/kg	< 0.05			0.05	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.05			0.05	Pass	
Allyl chloride	mg/kg	< 0.05			0.05	Pass	
Bromobenzene	mg/kg	< 0.05			0.05	Pass	
Bromochloromethane	mg/kg	< 0.05			0.05	Pass	
Bromodichloromethane	mg/kg	< 0.05			0.05	Pass	
Bromoform	mg/kg	< 0.05			0.05	Pass	
Bromomethane	mg/kg	< 0.05			0.05	Pass	
Carbon disulfide	mg/kg	< 0.05			0.05	Pass	
Carbon Tetrachloride	mg/kg	< 0.05			0.05	Pass	
Chlorobenzene	mg/kg	< 0.05			0.05	Pass	
Chloroethane	mg/kg	< 0.05			0.05	Pass	
Chloroform	mg/kg	< 0.05			0.05	Pass	
Chloromethane	mg/kg	< 0.05			0.05	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Dibromochloromethane	mg/kg	< 0.05			0.05	Pass	
Dibromomethane	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.05			0.05	Pass	
Iodomethane	mg/kg	< 0.05			0.05	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.05			0.05	Pass	
Methylene Chloride	mg/kg	< 0.05			0.05	Pass	
Styrene	mg/kg	< 0.05			0.05	Pass	
Tetrachloroethene	mg/kg	< 0.05			0.05	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.05			0.05	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.05			0.05	Pass	
Trichloroethene	mg/kg	< 0.05			0.05	Pass	
Trichlorofluoromethane	mg/kg	< 0.05			0.05	Pass	
Vinyl chloride	mg/kg	< 0.05			0.05	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons USEPA 8270 Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
Chlordane	mg/kg	< 0.1			0.1	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Polychlorinated Biphenyls USEPA 8082 Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride	mg/kg	< 100			100	Pass	
Sulphate (S)	mg/kg	< 10			10	Pass	
Method Blank							
Metals M8 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	%	90			70-130	Pass	
TRH C10-C14	%	124			70-130	Pass	
LCS - % Recovery							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons							
Benzene	%	113			70-130	Pass	
Toluene	%	122			70-130	Pass	
Ethylbenzene	%	110			70-130	Pass	
Total m+p-Xylenes	%	103			70-130	Pass	
Xylenes(ortho.meta and para)	%	106			70-130	Pass	
LCS - % Recovery							
Volatile Organics USEPA 8260 - MGT 350A Volatile Organics by GCMS							
1.1.1-Trichloroethane	%	77			70-130	Pass	
1.2-Dichloroethane	%	77			70-130	Pass	
Trichloroethene	%	75			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
TRH C6-C10	%	90			70-130	Pass	
TRH >C10-C16	%	128			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons USEPA 8270 Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	105			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Anthracene	%	127			70-130	Pass	
Benz(a)anthracene	%	80			70-130	Pass	
Benzo(a)pyrene	%	124			70-130	Pass	
Benzo(b)fluoranthene	%	118			70-130	Pass	
Benzo(g.h.i)perylene	%	111			70-130	Pass	
Benzo(k)fluoranthene	%	96			70-130	Pass	
Chrysene	%	129			70-130	Pass	
Dibenz(a.h)anthracene	%	104			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	107			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	77			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
Phenanthrene	%	76			70-130	Pass	
Pyrene	%	103			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	%	102			70-130	Pass	
4.4'-DDE	%	111			70-130	Pass	
4.4'-DDT	%	129			70-130	Pass	
a-BHC	%	109			70-130	Pass	
Aldrin	%	105			70-130	Pass	
b-BHC	%	98			70-130	Pass	
d-BHC	%	116			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	106			70-130	Pass	
Endosulfan II	%	104			70-130	Pass	
Endosulfan sulphate	%	111			70-130	Pass	
Endrin	%	129			70-130	Pass	
Endrin aldehyde	%	99			70-130	Pass	
Endrin ketone	%	99			70-130	Pass	
g-BHC (Lindane)	%	112			70-130	Pass	
Heptachlor	%	125			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	130			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls USEPA 8082 Polychlorinated Biphenyls							
Aroclor-1260	%	110			70-130	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	92			70-130	Pass	
Cyanide (total)	%	115			70-130	Pass	
Fluoride	%	83			70-130	Pass	
Sulphate (S)	%	97			70-130	Pass	
LCS - % Recovery							
Metals M8 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Arsenic	%	94			80-120	Pass	
Cadmium	%	94			80-120	Pass	
Chromium	%	84			80-120	Pass	
Copper	%	85			80-120	Pass	
Lead	%	84			80-120	Pass	
Mercury	%	113			75-125	Pass	
Nickel	%	84			80-120	Pass	
Zinc	%	111			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	M12-My09344	NCP	%	108			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1.1-Trichloroethane	M12-My08987	NCP	%	79			70-130	Pass	
1.2-Dichlorobenzene	M12-My08987	NCP	%	81			70-130	Pass	
1.2-Dichloroethane	M12-My08987	NCP	%	81			70-130	Pass	
Trichloroethene	M12-My08987	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
TRH >C10-C16	M12-My09344	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M12-My07016	NCP	%	114			70-130	Pass	
Acenaphthylene	M12-My07016	NCP	%	118			70-130	Pass	
Anthracene	M12-My07016	NCP	%	118			70-130	Pass	
Benz(a)anthracene	M12-My07016	NCP	%	81			70-130	Pass	
Benzo(a)pyrene	M12-My07016	NCP	%	111			70-130	Pass	
Benzo(b)fluoranthene	M12-My07016	NCP	%	101			70-130	Pass	
Benzo(g.h.i)perylene	M12-My07016	NCP	%	108			70-130	Pass	
Benzo(k)fluoranthene	M12-My07016	NCP	%	103			70-130	Pass	
Chrysene	M12-My07016	NCP	%	110			70-130	Pass	
Dibenz(a.h)anthracene	M12-My07016	NCP	%	97			70-130	Pass	
Fluoranthene	M12-My07016	NCP	%	116			70-130	Pass	
Fluorene	M12-My07016	NCP	%	122			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M12-My07016	NCP	%	116			70-130	Pass	
Naphthalene	M12-My07016	NCP	%	109			70-130	Pass	
Phenanthrene	M12-My07016	NCP	%	113			70-130	Pass	
Pyrene	M12-My07016	NCP	%	115			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	M12-My09450	CP	%	90			70-130	Pass	
4.4'-DDE	M12-My09450	CP	%	103			70-130	Pass	
4.4'-DDT	M12-My09450	CP	%	129			70-130	Pass	
a-BHC	M12-My09450	CP	%	105			70-130	Pass	
Aldrin	M12-My09450	CP	%	102			70-130	Pass	
b-BHC	M12-My09450	CP	%	89			70-130	Pass	
d-BHC	M12-My09450	CP	%	105			70-130	Pass	
Dieldrin	M12-My09450	CP	%	103			70-130	Pass	
Endosulfan I	M12-My09450	CP	%	100			70-130	Pass	
Endosulfan II	M12-My09450	CP	%	96			70-130	Pass	
Endosulfan sulphate	M12-My09450	CP	%	99			70-130	Pass	
Endrin	M12-My09450	CP	%	126			70-130	Pass	
Endrin aldehyde	M12-My09450	CP	%	83			70-130	Pass	
Endrin ketone	M12-My09450	CP	%	92			70-130	Pass	
g-BHC (Lindane)	M12-My09450	CP	%	105			70-130	Pass	
Heptachlor	M12-My09450	CP	%	116			70-130	Pass	
Heptachlor epoxide	M12-My09450	CP	%	103			70-130	Pass	
Hexachlorobenzene	M12-My09450	CP	%	101			70-130	Pass	
Methoxychlor	M12-My09450	CP	%	130			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	M12-My07446	NCP	%	99			70-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride	M12-My09499	NCP	%	88			70-130	Pass	
Sulphate (S)	M12-My09364	NCP	%	70			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Metals M8				Result 1					
Lead	M12-My09237	NCP	%	86			75-125	Pass	
Mercury	M12-My09450	CP	%	96			70-130	Pass	
Nickel	M12-My09247	NCP	%	75			75-125	Pass	
Zinc	A12-My10600	NCP	%	97			75-125	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M12-My09454	CP	%	87			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M12-My09460	CP	%	86			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M12-My09460	CP	%	108			70-130	Pass	
Toluene	M12-My09460	CP	%	118			70-130	Pass	
Ethylbenzene	M12-My09460	CP	%	105			70-130	Pass	
o-Xylene	M12-My09460	CP	%	105			70-130	Pass	
Total m+p-Xylenes	M12-My09460	CP	%	96			70-130	Pass	
Xylenes(ortho.meta and para)	M12-My09460	CP	%	99			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
TRH C6-C10	M12-My09460	CP	%	86			70-130	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	M12-My09460	CP	%	83			75-125	Pass	
Cadmium	M12-My09460	CP	%	84			75-125	Pass	
Chromium	M12-My09460	CP	%	76			75-125	Pass	
Copper	M12-My09460	CP	%	96			75-125	Pass	
Mercury	M12-My09460	CP	%	100			70-130	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M12-My09450	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M12-My09344	NCP	mg/kg	1300	1600	19	30%	Pass	
TRH C15-C28	M12-My09344	NCP	mg/kg	72	86	18	30%	Pass	
TRH C29-C36	M12-My09344	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.2.4-Trichlorobenzene	M12-My09450	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Hexachlorobutadiene	M12-My09450	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
1.1-Dichloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1-Dichloroethene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.1-Trichloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.2-Trichloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dibromoethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dichlorobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dichloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2-Dichloropropane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.3-Trichloropropane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.4-Trimethylbenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3-Dichlorobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3-Dichloropropane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3.5-Trimethylbenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.4-Dichlorobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
2-Butanone (MEK)	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Propanone (Acetone)	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4-Chlorotoluene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Allyl chloride	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Benzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromochloromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromodichloromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromoform	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromomethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Carbon disulfide	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Carbon Tetrachloride	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlorobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloroethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloroform	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chloromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
cis-1.2-Dichloroethene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
cis-1.3-Dichloropropene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dibromochloromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dibromomethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dichlorodifluoromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Ethylbenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Iodomethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Isopropyl benzene (Cumene)	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methylene Chloride	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
o-Xylene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Styrene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Tetrachloroethene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toluene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Total m+p-Xylenes	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
trans-1.3-Dichloropropene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Trichloroethene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Trichlorofluoromethane	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Vinyl chloride	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Xylenes(ortho.meta and para)	M12-My09450	CP	mg/kg	< 0.15	< 0.15	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	M12-My09450	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M12-My09450	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M12-My09344	NCP	mg/kg	1300	1500	19	30%	Pass	
TRH >C16-C34	M12-My09344	NCP	mg/kg	< 100	< 100	12	30%	Pass	
TRH >C34-C40	M12-My09344	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
4.4'-DDD	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordane	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
d-BHC	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M12-My09450	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M12-My09450	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride	M12-My09915	NCP	mg/kg	560	510	7.7	30%	Pass	
Sulphate (S)	M12-My09364	NCP	mg/kg	< 10	< 10	9.9	30%	Pass	
Duplicate									
IWRG 621 Metals : Metals M12				Result 1	Result 2	RPD			
Arsenic	M12-My09450	CP	mg/kg	15	8.6	54	30%	Fail	Q15
Cadmium	M12-My09450	CP	mg/kg	< 0.4	< 0.4	10	30%	Pass	
Chromium	M12-My09450	CP	mg/kg	25	18	32	30%	Fail	Q15
Copper	M12-My09450	CP	mg/kg	27	9.8	93	30%	Fail	Q15
Lead	M12-My09450	CP	mg/kg	19	18	2.0	30%	Pass	
Mercury	M12-My09450	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M12-My09450	CP	mg/kg	< 10	< 10	8.6	30%	Pass	
Nickel	M12-My09450	CP	mg/kg	18	12	44	30%	Fail	Q15
Selenium	M12-My09450	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M12-My09450	CP	mg/kg	< 5	< 5	28	30%	Pass	
Tin	M12-My09450	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M12-My09450	CP	mg/kg	14	19	29	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M12-My09454	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M12-My09460	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M12-My09460	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toluene	M12-My09460	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Ethylbenzene	M12-My09460	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
o-Xylene	M12-My09460	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Total m+p-Xylenes	M12-My09460	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes(ortho.meta and para)	M12-My09460	CP	mg/kg	< 0.15	< 0.15	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M12-My09460	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M12-My09460	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	M12-My09460	CP	mg/kg	3.4	3.2	5.0	30%	Pass	
Cadmium	M12-My09460	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M12-My09460	CP	mg/kg	33	32	1.0	30%	Pass	
Copper	M12-My09460	CP	mg/kg	19	19	3.0	30%	Pass	
Lead	M12-My09460	CP	mg/kg	21	14	41	30%	Fail	Q15
Mercury	M12-My09460	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M12-My09460	CP	mg/kg	26	27	6.0	30%	Pass	
Zinc	M12-My09460	CP	mg/kg	41	41	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
Q15	The RPD reported passes mgt-LabMark's Acceptance Criteria as stipulated in SOP 05. Refer to Glossary Page of this report for further details

Glenn Jackson

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

mgt-LabMark shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall mgt-LabMark be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

mgt LabMark ENVIRONMENTAL LABORATORIES

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Diomides & Associates Pty. Ltd.
11 Conway Ave
Donvale
Victoria 3111

Attention:Costa Diomides

Report	**337011-W**
Client Reference	BRUNSWICK DA 1468
Received Date	May 11, 2012

Client Sample ID			**RINSATE**
Sample Matrix			**Water**
mgt-LabMark Sample No.			**M12-My09464**
Date Sampled			**May 11, 2012**
Test/Reference	LOR	Unit	
Heavy Metals			
Lead (filtered)	0.001	mg/L	< 0.001
Mercury (filtered)	0.0001	mg/L	< 0.0001
Nickel (filtered)	0.001	mg/L	< 0.001
Arsenic (filtered)	0.001	mg/L	< 0.001
Cadmium (filtered)	0.0002	mg/L	< 0.0002
Chromium (filtered)	0.001	mg/L	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001
Zinc (filtered)	0.001	mg/L	< 0.001

Description	Testing Site	Extracted	Holding Time
Metals M8 filtered - Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury	Melbourne	May 14, 2012	28 Day

mgt LabMark ENVIRONMENTAL LABORATORIES

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NATA # 1261 Site # 18217

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1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Diomides & Associates Pty. Ltd.
Address: 11 Conway Ave
Donvale
Victoria 3111

Order No.:
Report #: 337011
Phone: 9842 2000
Fax: 9842 0322

Received: May 11, 2012 5:34 PM
Due: May 22, 2012 4:00 PM
Priority: 5 Day
Contact name: Costa Diomides

Client Job No.: BRUNSWICK DA 1468

mgt-LabMark Client Manager: Natalie Krasselt

Sample Detail					% Moisture	pH (1:5 Aqueous extract)	Sulphate (S)	Metals M8 filtered	mgt-LabMark Suite 13	Vic EPA IWRG 621 (Solids)	mgt-LabMark Suite 1	mgt-LabMark Suite 7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217												
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.15-0.25	May 11, 2012		Soil	M12-My09450	X		X			X		
BH1 0.3-0.4	May 11, 2012		Soil	M12-My09451	X							X
BH2 0.1-0.2	May 11, 2012		Soil	M12-My09452	X				X			X
BH2 0.3-0.4	May 11, 2012		Soil	M12-My09453	X							X
TP3 0.15-0.25	May 11, 2012		Soil	M12-My09454	X		X			X		
TP3 0.3-0.4	May 11, 2012		Soil	M12-My09455	X							X
TP4 0.1-0.2	May 11, 2012		Soil	M12-My09456	X							X
TP4 0.3-0.4	May 11, 2012		Soil	M12-My09457	X							X
TP5 0.1-02	May 11, 2012		Soil	M12-My09458	X					X		
TP5 0.3-0.4	May 11, 2012		Soil	M12-My09459	X							X
TP6 0.25-0.3	May 11, 2012		Soil	M12-My09460	X				X			X

mgt LabMark ENVIRONMENTAL LABORATORIES

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Diomides & Associates Pty. Ltd.
Address: 11 Conway Ave
Donvale
Victoria 3111

Order No.:
Report #: 337011
Phone: 9842 2000
Fax: 9842 0322

Received: May 11, 2012 5:34 PM
Due: May 22, 2012 4:00 PM
Priority: 5 Day
Contact name: Costa Diomides

Client Job No.: BRUNSWICK DA 1468

mgt-LabMark Client Manager: Natalie Krasselt

Sample Detail					% Moisture	pH (1:5 Aqueous extract)	Sulphate (S)	Metals M8 filtered	mgt-LabMark Suite 13	Vic EPA IWRG 621 (Solids)	mgt-LabMark Suite 1	mgt-LabMark Suite 7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217												
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
TP6 0.4-0.5	May 11, 2012		Soil	M12-My09461	X	X	X					X
BLIND	May 11, 2012		Soil	M12-My09462	X							X
FIELD BLANK	May 11, 2012		Soil	M12-My09463	X						X	
RINSATE	May 11, 2012		Soil	M12-My09464	X			X				

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis.
7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001)

For samples received on the last day of holding time, notification of testing requirements should have been received at least

6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as an RPD

UNITS

mg/kg:milligrams per Kilogram

µg/L:micrograms per litre

ppb: Parts per billion

org/100mL: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/L:milligrams per litre

ppm: Parts per million

%:Percentage

NTU: Nephelometric Turbidity Units

TERMS

Dry:	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR:	Limit Of Reporting.
SPIKE:	Addition of the analyte to the sample and reported as percentage recovery.
RPD:	Relative Percent Difference between two Duplicate pieces of analysis.
LCS:	Laboratory Control Sample - reported as percent recovery.
CRM:	Certified Reference Material - reported as percent recovery.
Method Blank:	In the case of solid samples these are performed on laboratory certified clean sands.
	In the case of water samples these are performed on de-ionised water.
Surr - Surrogate:	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate:	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate:	A second piece of analysis from a sample outside of the client's batch of samples but run within the laboratory batch of analysis.
Batch SPIKE:	Spike recovery reported on a sample from outside of the client's batch of samples but run within the laboratory batch of analysis.
USEPA:	U.S Environmental Protection Agency
APHA:	American Public Health Association
ASLP:	Australian Standard Leaching Procedure (AS4439.3)
TCLP:	Toxicity Characteristic Leaching Procedure
COC:	Chain Of Custody
SRA:	Sample Receipt Advice
CP:	Client Parent - QC was performed on samples pertaining to this report
NCP:	Non-Client Parent - QC was performed on samples not pertaining to this report, however QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample>
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data below the LOR with a positive RPD - eg: LOR 0.1, Result A = <0.1 (raw data is 0.02) & Result B = <0.1 (raw data is 0.03) resulting in a RPD of 40% calculated from the raw data.

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Metals M8 filtered USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Zinc (filtered)	mg/L	< 0.001			0.001	Pass	
LCS - % Recovery							
Metals M8 filtered USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Lead (filtered)	%	95			80-120	Pass	
Mercury (filtered)	%	117			70-130	Pass	
Nickel (filtered)	%	101			80-120	Pass	
Arsenic (filtered)	%	104			80-120	Pass	
Cadmium (filtered)	%	102			80-120	Pass	
Chromium (filtered)	%	104			80-120	Pass	
Copper (filtered)	%	104			80-120	Pass	
Zinc (filtered)	%	110			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Metals M8 filtered				Result 1					
Lead (filtered)	M12-My09342	NCP	%	87			75-125	Pass	
Mercury (filtered)	M12-My09740	NCP	%	95			70-130	Pass	
Nickel (filtered)	M12-My09342	NCP	%	91			75-125	Pass	
Arsenic (filtered)	M12-My09342	NCP	%	118			75-125	Pass	
Cadmium (filtered)	M12-My09342	NCP	%	96			75-125	Pass	
Chromium (filtered)	M12-My09342	NCP	%	88			75-125	Pass	
Copper (filtered)	M12-My09342	NCP	%	94			75-125	Pass	
Zinc (filtered)	M12-My09342	NCP	%	97			75-125	Pass	
Duplicate									
Metals M8 filtered				Result 1	Result 2	RPD			
Lead (filtered)	M12-My09342	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury (filtered)	M12-My09740	NCP	mg/L	< 0.0001	< 0.0001	21	30%	Pass	
Nickel (filtered)	M12-My09342	NCP	mg/L	0.0011	0.0012	9.0	30%	Pass	
Arsenic (filtered)	M12-My09342	NCP	mg/L	0.010	0.010	3.0	30%	Pass	
Cadmium (filtered)	M12-My09342	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium (filtered)	M12-My09342	NCP	mg/L	0.0022	0.0024	9.0	30%	Pass	
Copper (filtered)	M12-My09342	NCP	mg/L	< 0.001	< 0.001	4.0	30%	Pass	
Zinc (filtered)	M12-My09342	NCP	mg/L	< 0.001	0.0013	60	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q15	The RPD reported passes mgt-LabMark's Acceptance Criteria as stipulated in SOP 05. Refer to Glossary Page of this report for further details

Glenn Jackson
Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

mgt-LabMark shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall mgt-LabMark be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

COURIER

CHAIN OF CUSTODY

Attention: MGT-LabMark

Client: Diomides & Associates
Location: Brunswick
Project/No: DA 1468
Sample Type(s): Soil
Date Sampled: 11/05/12

DIOMIDES & ASSOCIATES PTY LTD
ENVIRONMENTAL CONSULTANTS
A.C.N. 056 657 848
11 Conway Avenue
Donvale
Victoria 3111
Ph: (03) 9842 2000
Fax: (03) 9842 0322

CHEMICAL ANALYSIS

SAMPLE IDENTITY	DEPTH	B7 - TPH/BTEX/PAH/ 8 Metals (inc Hg)	B13 – OCP/PCB	R1 - Vic EPA IWRG621	pH	Sulphate	B1 - TPH/BTEX	M8 – Metals M8 Screen (inc Hg)			REMARKS
BH 1	0.15-0.25m			√	√	√					1. Standard turn around time for
BH 1	0.3-0.4m	√									results please.
BH 2	0.1-0.2m	√	√								2. Please email a signed copy of this
BH 2	0.3-0.4m	√									chain of custody on receipt to
											sdiomides@diomides.com.au
TP 3	0.15-0.25m			√	√	√					
TP 3	0.3-0.4m	√									3. Please email results to the following
											email addresses:
TP 4	0.1-0.2m	√									sdiomides@diomides.com.au
TP 4	0.3-0.4m	√									cdiomides@diomides.com.au
TP 5	0.1-0.2m			√							
TP 5	0.3-0.4m	√									
TP 6	0.25-0.3m	√	√								
TP 6	0.4-0.5m	√			√	√					
										16	Total No. of Containers

Report # 337011

Sampled by: Costa Diomides
Relinquished by: Costa Diomides **Organisation:** Diomides & Assoc
Date: 11/05/12 **Time:** 2.00 pm
Relinquished by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Received by: Andrew **Organisation:** MGT
Date: 11/5/12 **Time:** 5:34pm
Received by: _____ **Organisation:** _____
Date: _____ **Time:** _____

CHAIN OF CUSTODY

Attention: MGT-LabMark

Client: Diomides & Associates
Location: Brunswick
Project/No: DA 1468
Sample Type(s): Soil
Date Sampled: 11/05/12

DIOMIDES & ASSOCIATES PTY LTD
ENVIRONMENTAL CONSULTANTS
A.C.N. 056 657 848
11 Conway Avenue
Donvale
Victoria 3111
Ph: (03) 9842 2000
Fax: (03) 9842 0322

CHEMICAL ANALYSIS

SAMPLE IDENTITY	DEPTH	B7 - TPH/BTEX/PAH/ 8 Metals (inc Hg)	B13 – OCP/PCB	R1 - Vic EPA IWRG621	pH	Sulphate	B1 - TPH/BTEX	M8 – Metals M8 Screen (inc Hg)			REMARKS
BLIND	-	√									
											Please see page 1 of 2
FIELD BLANK	-						√				
RINSATE	-							√			
										16	Total No. of Containers

Sampled by: Costa Diomides
Relinquished by: Costa Diomides **Organisation:** Diomides & Assoc
Date: 11/05/12 **Time:** 2.00 pm
Relinquished by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Report 337011
Received by: Andrew **Organisation:** MGT
Date: 11/5/12 **Time:** _____
Received by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 73186

Client:
Diomides & Assoc Pty Ltd
11 Conway Ave
Donvale
VIC 3111

Attention: Costa Diomides

Sample log in details:

Your Reference:	**DA 1468, Brunswick**
No. of samples:	1 Soil
Date samples received / completed instructions received	14/05/2012 / 14/05/2012

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.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	21/05/12 / 17/05/12
Date of Preliminary Report:	Not Issued

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Accredited for compliance with ISO/IEC 17025. **Tests not covered by NATA are denoted with *.**

Results Approved By:

Hinoko Miyazaki
Chemist

Giovanni Agosti
Technical Manager

Alex MacLean
Chemist

Jeremy Faircloth
Chemist

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

vTRH & BTEX in Soil		
Our Reference:	UNITS	73186-1
Your Reference	----------	BH2
Depth	----------	0.3-0.4
Type of sample		Soil
Date extracted	-	15/05/2012
Date analysed	-	16/05/2012
vTRH C_6 - C_9	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	99

sTRH in Soil (C10-C36)		
Our Reference:	UNITS	73186-1
Your Reference	----------	BH2
Depth	----------	0.3-0.4
Type of sample		Soil
Date extracted	-	15/05/2012
Date analysed	-	15/05/2012
$TRHC_{10}$ - C_{14}	mg/kg	<50
$TRHC_{15}$ - C_{28}	mg/kg	<100
$TRHC_{29}$ - C_{36}	mg/kg	<100
Surrogate o-Terphenyl	%	93

PAHs in Soil Our Reference: Your Reference Depth Type of sample	UNITS ---------- ----------	73186-1 BH2 0.3-0.4 Soil
Date extracted	-	15/05/2012
Date analysed	-	15/05/2012
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Surrogate p-Terphenyl-d_{14}	%	99

Acid Extractable metals in soil		
Our Reference:	UNITS	73186-1
Your Reference	----------	BH2
Depth	----------	0.3-0.4
Type of sample		Soil
Date digested	-	15/05/2012
Date analysed	-	15/05/2012
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.5
Chromium	mg/kg	11
Copper	mg/kg	7
Lead	mg/kg	14
Mercury	mg/kg	<0.1
Nickel	mg/kg	5
Zinc	mg/kg	6

Moisture		
Our Reference:	UNITS	73186-1
Your Reference	----------	BH2
Depth	----------	0.3-0.4
Type of sample		Soil
Date prepared	-	15/05/2012
Date analysed	-	16/05/2012
Moisture	%	21

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
Org-012 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Inorg-008	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.

QUALITY CONTROL vTRH & BTEX in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-7	15/05/2012
Date analysed	-			16/05/2012	73186-1	16/05/2012 || 16/05/2012	LCS-7	16/05/2012
vTRH C_6 - C_9	mg/kg	25	Org-016	<25	73186-1	<25 || <25	LCS-7	101%
Benzene	mg/kg	0.2	Org-016	<0.2	73186-1	<0.2 || <0.2	LCS-7	92%
Toluene	mg/kg	0.5	Org-016	<0.5	73186-1	<0.5 || <0.5	LCS-7	99%
Ethylbenzene	mg/kg	1	Org-016	<1	73186-1	<1 || <1	LCS-7	101%
m+p-xylene	mg/kg	2	Org-016	<2	73186-1	<2 || <2	LCS-7	104%
o-Xylene	mg/kg	1	Org-016	<1	73186-1	<1 || <1	LCS-7	106%
Surrogate aaa-Trifluorotoluene	%		Org-016	104	73186-1	99 || 102 || RPD: 3	LCS-7	107%

QUALITY CONTROL sTRH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-7	15/05/2012
Date analysed	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-7	15/05/2012
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	73186-1	<50 || <50	LCS-7	83%
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	73186-1	<100 || <100	LCS-7	103%
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	73186-1	<100 || <100	LCS-7	99%
Surrogate o-Terphenyl	%		Org-003	91	73186-1	93 || 94 || RPD: 1	LCS-7	74%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-7	15/05/2012
Date analysed	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-7	15/05/2012
Naphthalene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	104%
Acenaphthylene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	97%
Phenanthrene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	105%
Anthracene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	100%
Pyrene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	109%
Benzo(a)anthracene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	LCS-7	108%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Benzo(b+k)fluoranthene	mg/kg	0.2	Org-012 subset	<0.2	73186-1	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	Org-012 subset	<0.05	73186-1	<0.05 || <0.05	LCS-7	94%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012 subset	<0.1	73186-1	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d_{14}	%		Org-012 subset	104	73186-1	99 || 105 || RPD: 6	LCS-7	102%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date digested	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-1	15/05/2012
Date analysed	-			15/05/2012	73186-1	15/05/2012 || 15/05/2012	LCS-1	15/05/2012
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	73186-1	<4 || <4	LCS-1	87%
Cadmium	mg/kg	0.5	Metals-020 ICP-AES	<0.5	73186-1	<0.5 || <0.5	LCS-1	91%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	73186-1	11 || 13 || RPD: 17	LCS-1	94%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	73186-1	7 || 8 || RPD: 13	LCS-1	95%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	73186-1	14 || 10 || RPD: 33	LCS-1	92%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	73186-1	<0.1 || <0.1	LCS-1	101%
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	73186-1	5 || 5 || RPD: 0	LCS-1	95%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	73186-1	6 || 7 || RPD: 15	LCS-1	95%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			[NT]
Date analysed	-			[NT]
Moisture	%	0.1	Inorg-008	[NT]

Report Comments:

Asbestos ID was analysed by Approved Identifier:	Not applicable for this job
Asbestos ID was authorised by Approved Signatory:	Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

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.

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 batched of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

CHAIN OF CUSTODY

Attention: Envirolab Services

Client: Diomides & Associates
Location: Brunswick
Project/No: DA 1468
Sample Type(s): Soil
Date Sampled: 11/05/12

DIOMIDES & ASSOCIATES PTY LTD
ENVIRONMENTAL CONSULTANTS
A.C.N. 056 657 848
11 Conway Avenue
Donvale
Victoria 3111
Ph: (03) 9842 2000
Fax: (03) 9842 0322

CHEMICAL ANALYSIS

	SAMPLE IDENTITY	DEPTH	Combination 3 - TPH/BTEX/ PAH/8 Metals (inc. Hg)									REMARKS
												1. Standard turn around time for
1	BH 2	0.3-0.4 m	√									results please.
												2. Please fax a signed copy of this
												chain of custody on receipt to
												(03) 9842 0322 or email to
												sdiomides@diomides.com.au
												3. Please email results to the following
												email addresses:
												sdiomides@diomides.com.au
												cdiomides@diomides.com.au
										1		Total No. of Containers

Chain of Custody
73186
Received: 14.5.12
Received: 12pm
Ambient
Chilled
Other/None

Sampled by: Costa Diomides
Relinquished by: Costa Diomides **Organisation:** Diomides & Assoc
Date: 11/05/12 **Time:** 2.00 pm
Relinquished by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Received by: _____ **Organisation:** _____
Date: _____ **Time:** _____
Received by: _____ **Organisation:** _____
Date: _____ **Time:** _____

Appendix E

Site Photographs

Photo 1 : View from north-west corner of the site
(next to site entrance), looking south-east towards the office building across the brick carpark (4.04.13)

Photo 2 : View of the inside of the fire services main (4.04.13)

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **101 – 105 Hope Street** **Brunswick**	PROJECT:	78938.00
		PLATE No:	1
		REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Photo 3 : View of the oil drums observed on the surface of the brick carpark (4.04.13)

Photo 4 : View of the construction and demolition debris located on the southern section of the site, in the previous warehouse building space (4.04.13)

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	78938.00
	101 – 105 Hope Street	PLATE No:	2
	Brunswick	REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Photo 5 : View of the stockpiles of filling of unknown origins located on the southern section of the site, on the previous warehouse building space (4.04.13)

Photo 6 : View of the pipe located on the southern section of the site, on the previous warehouse building space (4.04.13)

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **101 – 105 Hope Street** **Brunswick**	PROJECT:	78938.00
		PLATE No:	3
		REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Photo 7: Soil and crushed rock stockpiles (12.07.13)

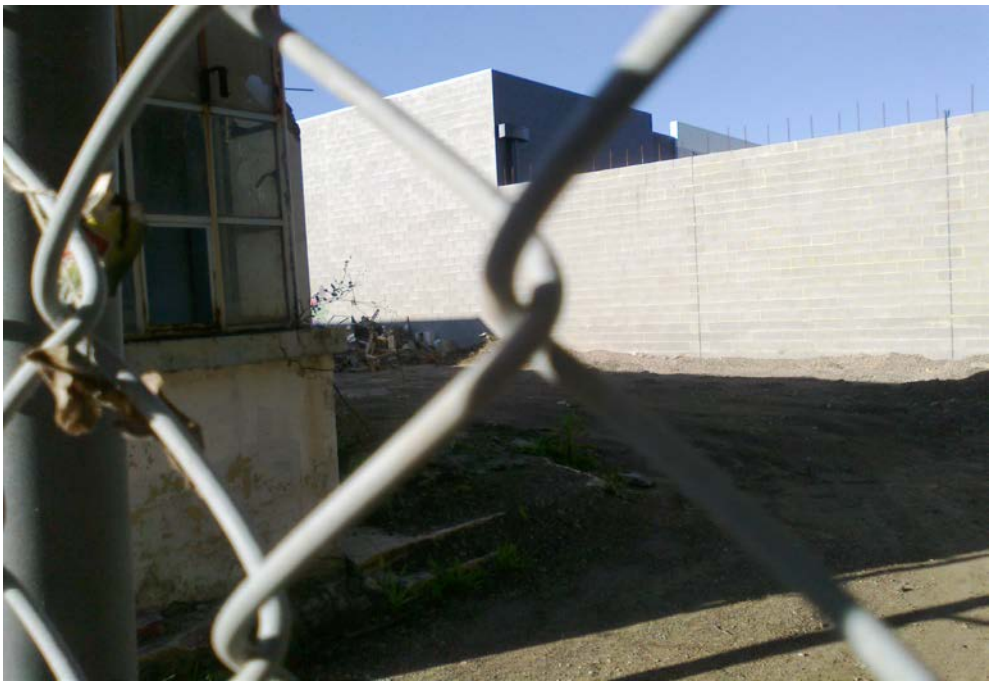

Photo 8: Soil and crushed rock stockpiles. Demolition waste. (12.07.13)

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **101 – 105 Hope Street** **Brunswick**	PROJECT:	78938.00
		PLATE No:	4
		REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Photo 9: Site view. Stockpiles removed (20.07.13)

Photo 10: Site view. Stockpiles removed (20.07.13)

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **101 – 105 Hope Street** **Brunswick**	PROJECT:	78938.00
		PLATE No:	5
		REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Photo 11: Site view from Hope Street (20.07.13).

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **101 – 105 Hope Street** **Brunswick**	PROJECT:	78938.00
		PLATE No:	6
		REV:	A
	CLIENT: Roden Street Pty Ltd	DATE:	July 2013

Appendix F

Auditor's Statistical Analysis of Data

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	
From File	WorkSheet.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Arsenic

General Statistics

Number of Valid Data	12	Number of Detected Data	9
Number of Distinct Detected Data	8	Number of Non-Detect Data	3
		Percent Non-Detects	25.00%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	2.1	Minimum Detected	0.742
Maximum Detected	33	Maximum Detected	3.497
Mean of Detected	8.144	Mean of Detected	1.618
SD of Detected	10.17	SD of Detected	0.947
Minimum Non-Detect	2	Minimum Non-Detect	0.693
Maximum Non-Detect	2	Maximum Non-Detect	0.693

Warning: There are only 9 Detected Values in this data
Note: It should be noted that even though bootstrap may be performed on this data set
the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.661	Shapiro Wilk Test Statistic	0.859
5% Shapiro Wilk Critical Value	0.829	5% Shapiro Wilk Critical Value	0.829
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	6.358	Mean	1.213
SD	9.256	SD	1.09
95% DL/2 (t) UCL	11.16	95% H-Stat (DL/2) UCL	16.76

Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	4.717	Mean in Log Scale	1.039
SD	10.63	SD in Log Scale	1.338
95% MLE (t) UCL	10.23	Mean in Original Scale	6.242
95% MLE (Tiku) UCL	10.28	SD in Original Scale	9.331
		95% t UCL	11.08
		95% Percentile Bootstrap UCL	11
		95% BCA Bootstrap UCL	13.18
		95% H UCL	29.1

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.861	Data Follow Appr. Gamma Distribution at 5% Significance Level
Theta Star	9.456	
nu star	15.5	

		Nonparametric Statistics	
A-D Test Statistic	0.823		
5% A-D Critical Value	0.74	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.74	Mean	6.633
5% K-S Critical Value	0.286	SD	8.707
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean	2.666
		95% KM (t) UCL	11.42
Assuming Gamma Distribution		95% KM (z) UCL	11.02
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	11.3
Minimum	1.00E-06	95% KM (bootstrap t) UCL	28.07
Maximum	33	95% KM (BCA) UCL	11.23
Mean	6.108	95% KM (Percentile Bootstrap) UCL	11.06
Median	2.6	95% KM (Chebyshev) UCL	18.25
SD	9.423	97.5% KM (Chebyshev) UCL	23.28
k star	0.194	99% KM (Chebyshev) UCL	33.16
Theta star	31.55		
Nu star	4.646	Potential UCLs to Use	
AppChi2	0.992	95% KM (Chebyshev) UCL	18.25
95% Gamma Approximate UCL	28.6		
95% Adjusted Gamma UCL	37.15		

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	
From File	WorkSheet.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Lead

General Statistics			
Number of Valid Data	12	Number of Detected Data	11
Number of Distinct Detected Data	11	Number of Non-Detect Data	1
		Percent Non-Detects	8.33%
Raw Statistics		Log-transformed Statistics	
Minimum Detected	**7.1**	Minimum Detected	1.96
Maximum Detected	**540**	Maximum Detected	6.292
Mean of Detected	**67.15**	Mean of Detected	3.061
SD of Detected	**157.7**	SD of Detected	1.257
Minimum Non-Detect	5	Minimum Non-Detect	1.609
Maximum Non-Detect	5	Maximum Non-Detect	1.609
UCL Statistics			
Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.424	Shapiro Wilk Test Statistic	0.79
5% Shapiro Wilk Critical Value	0.85	5% Shapiro Wilk Critical Value	0.85
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	61.77	Mean	2.882
SD	151.5	SD	1.349
95% DL/2 (t) UCL	140.3	95% H-Stat (DL/2) UCL	190.8
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	53.11	Mean in Log Scale	2.827
SD	153.3	SD in Log Scale	1.447
95% MLE (t) UCL	132.6	Mean in Original Scale	61.67
95% MLE (Tiku) UCL	125.9	SD in Original Scale	151.6
		95% t UCL	140.3
		95% Percentile Bootstrap UCL	148.8
		95% BCA Bootstrap UCL	196
		95% H UCL	251.2
Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only	
k star (bias corrected)	0.458	Data do not follow a Discernable Distribution (0.05)	
Theta Star	146.6		
nu star	10.08		
A-D Test Statistic	1.765	Nonparametric Statistics	
5% A-D Critical Value	0.778	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.778	Mean	62.15
5% K-S Critical Value	0.268	SD	144.9
Data not Gamma Distributed at 5% Significance Level		SE of Mean	43.88
		95% KM (t) UCL	141
Assuming Gamma Distribution		95% KM (z) UCL	134.3
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	140.5
Minimum	1.00E-06	95% KM (bootstrap t) UCL	1080
Maximum	540	95% KM (BCA) UCL	147.7
Mean	61.56	95% KM (Percentile Bootstrap) UCL	147.8
Median	14	95% KM (Chebyshev) UCL	253.4
SD	151.6	97.5% KM (Chebyshev) UCL	336.2
k star	0.267	99% KM (Chebyshev) UCL	498.8
Theta star	230.2		
Nu star	6.417	**Potential UCLs to Use**	
AppChi2	1.857	**97.5% KM (Chebyshev) UCL**	**336.2**
95% Gamma Approximate UCL	212.8		
95% Adjusted Gamma UCL	262.1		

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

Appendix G

Auditor Correspondence with Assessor and Site Owner

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Phone (03) 9428 1831
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Project : 78938.00
5 March 2013
Ref : PSM : ae

Diomides & Associates
11 Conway Ave
Donvale Vic 3111

Attention: Stephen Diomides

Email: sdiomides@diomides.com.au

Dear Sirs,

Auditor Comment on Site Assessment Report - Environmental Audit 101 – 105 Hope Street, Brunswick

1. Introduction

I have conducted a review of your report "*SITE CONTAMINATION ASSESSMENT 101-105 Hope Street, Brunswick, Victoria*", date 26 June 2012 (your reference CD1379 DA1468) ['the SCA Report']. The SCA Report was provided to me in the context of the Environmental Audit of the subject site, which is identified on page 3 of the report as Lot 2 on PS89346.

The objectives of the SCA Report were to:

- Conduct a site history assessment;
- Investigate the nature and distribution of any sub-surface contamination;
- Report on the results of the investigations, and
- Provide an appraisal of the significance of any contaminant levels.

Detailed comments on the SCA Report are provided in the attached Table 1, and there are two significant items to which I would draw your attention, as discussed below.

2. Confirmation of the investigation / Audit Area

Intrusive sampling was conducted at six separate locations, selected on a systematic grid pattern, consistent with the guidance contained in AS 4482.1-2005, for a site of 0.1 hectare (compared with the 1200 m^2 area of the subject site). In addition, a reasonably comprehensive site history of the property known as 101-105 Hope Street, Brunswick is described and its outcomes reported.

However, it is not clear to what extent many of the activities identified in the Site History study were conducted on the subject site, which constitutes the Audit Area, and what activities might have been conducted on other parts of the site. Related to this, the historical title documentation from 26 January 1971 indicates that Lot 2 PS89346 is approximately 135 m long.

Clarifying the correct site boundaries and identifiers has significance for the identification of on-site and off-site sources of contamination which can, in turn, be significant for the completion of the Environmental Audit. Clarification of this point will be an important feature in completing the Environmental Audit.

Related to this matter, there are no Title documents presented for the period prior to 26 Jan 1971. Other Titles should also be provided, for prior years, to support the information about previous ownership and use.

3. Groundwater Assessment

There is no discussion of groundwater, and the potential for it to be contaminated, other than a Groundwater Database Search, and statements that there was no evidence of potential groundwater contamination sources (such as underground storage tanks, sumps, stormwater pits and triple interceptor traps). As a minimum, there should be a desktop hydrogeological assessment undertaken to identify if there is any potential risk of groundwater contamination. EPA Victoria Publication 668, *Hydrogeological assessment (groundwater quality) guidelines* (Sept 2006), describes the process which should be followed. The key outcomes would be a conceptual hydrogeological model which describes:

- Likely possible depth to groundwater and expected groundwater flow direction;
- Expected groundwater segment at the site (based on TDS);
- Proximity of possible off-site potential contamination sources and groundwater users;
- Identification of the expected receiving surface water body.

It is noted that, based on the information in the SCA Report, there are not expected to be any on-site surface water bodies or extractive groundwater users.

4. Closure

The matters discussed above, and the comments presented in Table 1, should be suitably addressed, and the Site Contamination Report revised.

If you have any queries regarding these comments, please feel free to contact me on 03 9428 1831.

Yours faithfully,
Douglas Partners Pty Ltd

Paul Moritz
Principal

Attachments: Table 1

cc: Mr Joe DiMonte

Table 1 : Site Contamination Assessment Report

Report	CD 1379 DA1468 Site Contamination Assessment	
Issue No.	**Report reference**	**Audit Issue**
1	1.0 Introduction pg1	Is the Diomides report dated 21 May 2009 available and has it been included in the lists of references? Is it relied upon in this report? What were the results of the preliminary investigations.
2	3.1 General Background pg3	a) Can you identify if the area under Audit is all, or part of, the site represented by the Lot and Plan of Subdivision description provided.
		b) Is the Planning Permit available at this time?
3	3.2 Site inspection pg4	The locations of the stormwater pits do not appear to be marked on Figure 2. Can they please be included.
4	3.4 Priority Sites Register & Nearby Audits pg7	Can you confirm that the site is 'not in the vicinity of" a site listed on the Priority Sites Register, as would be stated (if it was the case) on a PSR Extract obtained on-line from EPA's commercial providers.
5	3.5 Groundwater Database Search pg8	Can you please explain the abbreviation "SEC" used in the first and second paragraphs on this page. *ie.* "*SEC unidentified use*" and "*unknown SEC purposes*".
6	3.6 Site History pg10	Based on an interview with a previous owner, it is concluded that there were no chemicals stored or used on site when it was used for sheet metal works. What consideration was given to the use of acids (such as hydrochloric, or "spirits of salts ") during such activities?
7	3.6 Site History pg11	a) Please check the dates related to the information provided by Mr Tedge. Based on the information provided in your report, Mr Tedge would be about 113 years old.
		b) The information provided by Mr Tedge, on past activities, would suggest that varnishes and thinners would have been used on site. While, perhaps, not considered chemicals, these materials are potential sources of contaminants such as petroleum hydrocarbons and MAH.

Report	CD 1379 DA1468 Site Contamination Assessment	
Issue No.	**Report reference**	**Audit Issue**
8	3.6 Site History pg12	The report notes the presence of a number of former clay quarries in the vicinity which, from the aerial photos, appear to have been filled. As a minimum, there should be a desktop assessment of the likelihood of landfill gas generation and potential impact on the site. Some of these quarry sites have been the subject of environmental audits.
9	Table 1, pg16	There is an apparent 10-year gap in the site history, between 1914 and 1924.
10	Table 2 - pg17	a) Given the early stage at which the site was developed for industrial uses, it is unlikely that that its use for farming would have contributed any of the potential contaminants listed for that activity.
		b) Asbestos is listed as a potential contaminant in filling at the site, but no analysis is listed in Table 3. Can this be explained, please.
11	4.2 Drilling, test pits and sampling pg18-20	Sampling procedures do not seem to be described here. Are they described elsewhere in the report? Please respond.
12	7.2 Results pg28	The beneficial use 'maintenance of highly modified ecosystems" has more than "limited relevance" at the site. It is a protected beneficial use for High Density residential use, which the SEPP (PMCL) describes as making "..*maximum use of available land space and there is minimal access to soil*.." This description is, appropriately, applied to the proposed development, but the protected beneficial use is still relevant.
13	7.2 Results pg32	The use of the terms 'detection limit' and "method detection limit" is not appropriate in these circumstances. mgt-LabMark quotes results as "less than the limit of reporting". The limit of reporting is not the same as the method detection limit.
14	Table 4 - pg33	That sampling was conducted on a systematic basis across the site is stated as evidence that data representivity was achieved. However, the question is whether or not the samples taken represent the conditions at the site. So, for example, were samples taken from each separate profile in the soil horizon at each location? Was the filling material homogeneous or heterogeneous, and what action was taken to ensure representivity in the latter case?

Report	CD 1379 DA1468 Site Contamination Assessment	
Issue No.	**Report reference**	**Audit Issue**
15	7.2 Results pg34	a) Please consider the impact of soil pH on the beneficial use Buildings and Structures. All protected beneficial uses must be considered within the audit context.
		b) In discussing contaminant concentration data at BH 2 and TP 3, arsenic and lead concentrations are described as "elevated". Are they elevated compared to background concentrations, or some other benchmark?
16	Appendix K - Laboratory results	Sulfate results are reported as 'Sulphate (S)",but are compared with the NEPM EIL value, which is for sulfate as $SO_4^{=}$. The data in the Table of Results should be adjusted accordingly.
		There is an anomalous result reported for lead in TP3. The concentration from 0.3-0. 4 m, in natural soil, is great than the concentration in the sample in filling directly above it, where the lead concentration was quite low. Further sampling may be required to investigate this.

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Project : 78938.00
8 April 2013
PSM : ae

Diomides & Associates
11 Conway Ave
Donvale Vic 3111

Attention: Steve Diomides

Email: sdiomides@diomides.com.au

Dear Steve,

Environmental Audit, 101 – 105 Hope Street, Brunswick
Site Visit Observations and Further Assessment Actions

As discussed during our phone conversation this morning, I attended the site on Thursday 4 April 2013, to make an inspection and to meet with the site owner, Mr Joe Di Monte.

The site was, largely, as described in your site assessment report of 26 June 2012, except that a large part of the building on the southern portion of the site had been demolished, and a new concrete block wall was present on the southern boundary. I observed two features which warrant further investigation, also as discussed this morning.

On the southern side of the remnant wall running east-west through the site, there is a wide diameter pipe protruding about 1 metre above the ground surface at that point. (See attached photograph IMG_9044). In the southwest corner of the site, abutting the boundary concrete block wall are several stockpiles of crushed rock and soil-bearing material. Mr Di Monte described the middle (and lighter-coloured, see attached photograph IMG_9043) of these as coming from a Delta Excavations site.

Site investigations should be undertaken to:

- Confirm that the protruding pipe is not connected to any underground feature(s) which may constitute a potential source of contamination; and
- Verify that the crushed rock, understood to come from another re-development site, has not contaminated, does not have the potential to contaminate, the site.

We discussed various approaches to these two further aspects of investigation. Which ever course of action you adopt, the objective should be to demonstrate that there is no contamination or potential contamination on the site which was not previously identified in your site assessment report.

If you have any queries arising from this letter, please don't hesitate to call me.

Yours faithfully
Douglas Partners Pty Ltd

Paul Moritz
Principal
Environmental Auditor (appointed pursuant to the
Environment Protection Act 1970)

Attachments: Site Photographs

cc: Mr Joe Di Monte - Roden Street Pty Ltd

Photo 1 : Protruding pipe adjacent east-west wall

Photo 2 : Soil Stockpiles – southwest corner of site

Douglas Partners Geotechnics / Environment / Groundwater	**SITE PHOTOGRAPHS** **101 – 105 Hope Street** **Brunswick**	PROJECT NO. : 78939.00 PLATE No: 1
	CLIENT: **Diomides & Associates**	DATE: April 2013

DIOMIDES & ASSOCIATES PTY LTD
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MEMORANDUM

TO: Douglas Partners

ATTENTION: Dr Paul Moritz DATE: March 19, 2013

FROM: Costa Diomides
Our Ref: DA1468

RE: RESPONSE TO DR PAUL MORITZ'S AUDIT ISSUES OF MARCH 5, 2013
PROPERTY: 101 – 105 HOPE STREET, BRUNSWICK

The following are the clarification points requested by Paul Moritz in a letter dated March 5, 2013 for 101 – 105 Hope Street, Brunswick. Please note the Diomides & Associates response in each case is provided below the relevant comment and is provided in blue text.

Confirmation of the investigation / Audit Area

Intrusive sampling was conducted at six separate locations, selected on a systematic grid pattern, consistent with the guidance contained in AS 4482.1-2005, for a site of 0.1 hectare (compared with the 1200 m^2 area of the subject site). In addition, a reasonably comprehensive site history of the property known as 101-105 Hope Street, Brunswick is described and its outcomes reported.

However, it is not clear to what extent many of the activities identified in the Site History study were conducted on the subject site, which constitutes the Audit Area, and what activities might have been conducted on other parts of the site. Related to this, the historical title documentation from 26 January 1971 indicates that Lot 2 PS89346 is approximately 135 m long.

Clarifying the correct site boundaries and identifiers has significance for the identification of on-site and off-site sources of contamination which can, in turn, be significant for the completion of the Environmental Audit. Clarification of this point will be an important feature in completing the Environmental Audit.

Related to this matter, there are no Title documents presented for the period prior to 26 Jan 1971. Other Titles should also be provided, for prior years, to support the information about previous ownership and use.

The audit investigation area consists only of the northern part of the larger Lot 2 on Plan of Subdivision 089346. The area under investigation was defined as per the survey plan attached as Figure 2 in the Diomides & Associates June 26, 2012 report. This information was used in the 2012 report given that the subject site had not been subdivided at that stage of reporting (i.e. subdivision officially occurred on July 21, 2012).

The audit investigation area can now be more clearly defined as Lot 1 on Plan of Subdivision 626893 (Volume 11365 Folio 587) as per the attached updated Certificate of Title and updated Land Victoria Property report.

In terms of the activities conducted on the subject site (i.e. the audit area), most of the activities and processes described in the text for the larger property (i.e. Lot 2 on PS 089346), are unlikely to have taken place at the subject site given that according to the 1951 aerial photograph the subject site consisted of a car park, office and only a very small part of the factory warehouse.

Diomides & Associates have also obtained copies of historical Certificate of Titles (see attached historical Certificate of Titles) that date back to April 7, 1942 that confirm that the subject site was listed under the name Marbut Proprietary Limited which is consistent with information provided in the Sands and McDougall Directory of Victoria and communications with Mr. Vern Tedge (employee of Marbut Moulding

Pty Ltd). Diomides & Associates do not consider it necessary to obtain further historical Titles given that the Sands and McDougall Directory of Victoria and Mr. Vern Tedge both have confirmed that the subject site was occupied by Marbut Pty Ltd prior to 1942.

Groundwater Assessment

There is no discussion of groundwater, and the potential for it to be contaminated, other than a Groundwater Database Search, and statements that there was no evidence of potential groundwater contamination sources (such as underground storage tanks, sumps, stormwater pits and triple interceptor traps). As a minimum, there should be a desktop hydrogeological assessment undertaken to identify if there is any potential risk of groundwater contamination. EPA Victoria Publication 668, Hydrogeological assessment (groundwater quality) guidelines (Sept 2006), describes the process which should be followed. The key outcomes would be a conceptual hydrogeological model which describes:

- Likely possible depth to groundwater and expected groundwater flow direction;

  Diomides & Associates have reviewed five nearby audit reports located with in a 350 metre radius of the subject site that was attached as Appendix C2 of the Diomides & Associates June 2012 report. The review indicates that the possible groundwater depth ranges between 3.0 to 15 metres, however, the 3.0 metre groundwater depth would most likely relate to perched water and is unlikely to represent groundwater. The groundwater depth is most likely to be between 8 and 15 metres below ground level. According to the audit review, it is anticipated that groundwater flow is in a west to south-westerly direction.

- Expected groundwater segment at the site (based on TDS);

  The expected groundwater segment is likely to be Segment B or C according to the nearby audits review attached as Appendix C2 of the Diomides & Associates June 2012 report.

- Proximity of possible off-site potential contamination sources and groundwater users;

  Based on our site inspection of the current neighbouring properties (see Section 3.3 of the Diomides & Associates June 2012 report) and information provided in the Sands & McDougall Directory of Victoria (see Appendix F of the Diomides & Associates June 2012 report) the following possible off-site potential contaminations sources include the following:

  - 102 Henkel Street is located approximaltey 10 metres south or cross gradient of the subject site and in more recent time has been occupied by a metal manufacturer. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is likely to be located cross gradient of the subject site;
  - 421 Victoria Street is located approximaltey 20 metres south-west or down gradient of the subject site and in more recent time has been occupied by an electrical accessories manufacturer/wholesaler. Historically this site was occupied by Melbourne Pottery Co Pty Ltd during the 1910s to 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is likely to be located down gradient of the subject site;
  - 65 Hope Street is located approximately 225 metres east of the subject site and was historically used as a brass foundry between the 1950s and 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is located some distance away from the subject site and consisted of a small scale foundry;
  - 67-67a Hope Street is located approximately 220 metres east of the subject site and was historically used by engineers/electroplaters and a boot repairer between the 1920s and 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is located some distance away from the subject site and consisted of a small scale engineering business and boot repairer;
  - 397 Victoria Street is located approximately 220 metres south-east of the subject site and was historically used by engineers during the 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is located some distance away from the subject site and is located down gradient of the subject site;
  - 399-417 Victoria Street is located approximately 190 metres south to south-east of the subject site and was historically used by brush manufacturers and sawmills during the 1930s to 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is located some distance away from the subject site and is located down gradient of the subject site;

- 419-423 Victoria Street is located approximately 190 metres south to south-east of the subject site and was historically used by brush manufacturers and sawmills during the 1930s to 1970s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that it is located some distance away from the subject site and is located down gradient of the subject site;
- 99 Hope Street is located immediately east of the subject site and was historically used as a concrete works during the 1940s and 1950s. Diomides & Associates consider this property not to be a potential off-site source of contamination given that the activity took place more than 60 years ago; and,
- All other historical industrial properties including a number of clay quarries (see further detail below for a desktop study of nearby quarries) were located west or south of the subject site and are considered to be cross gradient or down gradient of the subject site. Diomides & Associates consider these properties not to be a potential off-site source of contamination at the subject site.

According to the groundwater database search attached in Appendix D of the Diomides & Associates June 2012 report, most of the nearby groundwater bores are used for investigation purposes or by the State Electricity Commission (SEC) for an unknown purpose. Only one of the bores presented in the groundwater database are listed as being used for domestic stock watering purposes. However, given that the subject site is located in the inner suburbs of Melbourne and given a reticulated water supply, it is considered unlikely that groundwater would currently be used for domestic stock watering purposes.

- Identification of the expected receiving surface water body.

  Diomides & Associates have identified the expected receiving surface water bodies located in close proximity to the subject site on page 3 and 4 of the Diomides & Associates June 2012 report. As previously stated "the direction of the closest water bodies to the subject site include: (i) Moonee Ponds Creek located approximately 1.5 kilometres west of the site; (ii) Merri Creek located approximately 2.7 kilometres east of the site; (iii) the Maribyrnong River located 4.7 kilometres west of the site; and, (iv) the Yarra River located approximately 5.4 kilometres south-east of the subject site. Based on topography it is considered that the surface water and local groundwater are likely to flow in a westerly to south-westerly direction."

Given the information provided above and the information provided in the Diomides & Associates June 2012 report, Diomides & Associates consider the groundwater beneath the subject site to be consistent with regional groundwater in the area.

It is noted that, based on the information in the SCA Report, there are not expected to be any on-site surface water bodies or extractive groundwater users.

Report	**CD 1379 DA1468 Site Contamination Assessment**	
Issue No.	**Report reference**	**Audit Issue**
1	1.0 Introduction pg1	Is the Diomides report dated 21 May 2009 available and has it been included in the lists of references? Is it relied upon in this report? What were the results of the preliminary investigations. The Diomides & Associates preliminary report dated May 21, 2009 is available for review and was conducted for due diligence purposes. The 2009 preliminary report was not intended to be used for audit purposes and should **not** be used for audit purposes other than background information. The 2009 preliminary report was not relied upon for the Diomides & Associates Site Contamination Assessment report dated June 26, 2012 and has not been referenced in the June 2012 report. The results of the 2009 preliminary report indicated that no significant contaminants were present at the three sampling locations. Please see the attached Diomides & Associates preliminary report dated May 21, 2009 for further detail.
2	3.1 General Background pg3	a) Can you identify if the area under Audit is all, or part of, the site represented by the Lot and Plan of Subdivision description provided.

		The audit investigation area consists only of the northern part of the larger Lot 2 on Plan of Subdivision 089346. The area under investigation was defined as per the survey plan attached as Figure 2 in the Diomides & Associates June 26, 2012 report. This information was used in the 2012 report given that the subject site had not been subdivided at that stage of reporting (i.e. subdivision officially occurred on July 21, 2012). The audit investigation area can now be more clearly defined as Lot 1 on Plan of Subdivision 626893 (Volume 11365 Folio 587) as per the attached updated Certificate of Title and updated Land Victoria Property report.
		b) Is the Planning Permit available at this time? The planning permit still remains unavailable and the matter will be going to VCAT in May 2013.
3	3.2 Site inspection pg4	The locations of the stormwater pits do not appear to be marked on Figure 2. Can they please be included. The stormwater drain consists of a long drainage grate that runs parallel to the western driveway and has a length of approximately 15 to 20 metres. The drainage grate has been included in an updated site plan attached as Figure 2.
4	3.4 Priority Sites Register & Nearby Audits pg7	Can you confirm that the site is 'not in the vicinity of" a site listed on the Priority Sites Register, as would be stated (if it was the case) on a PSR Extract obtained on-line from EPA's commercial providers. Diomides & Associates can confirm that the subject site is **not** in the vicinity of a site listed on the Priority Sites Register (version dated November 9, 2012 which is EPA Victoria's most current edition available online). Please see the attached copy of the Priority Sites Register dated November 9, 2012.
5	3.5 Groundwater Database Search pg8	Can you please explain the abbreviation "SEC" used in the first and second paragraphs on this page. *ie.* "*SEC unidentified use*" and "*unknown SEC purposes*". SEC = State Electricity Commission.
6	3.6 Site History pg10	Based on an interview with a previous owner, it is concluded that there were no chemicals stored or used on site when it was used for sheet metal works. What consideration was given to the use of acids (such as hydrochloric, or "spirits of salts ") during such activities? Based on our interview with the previous owner and a site inspection conducted by Diomides & Associates, it is our opinion that the use of acids was not likely to have been used at the subject site and the area immediately south of the subject site. However, Diomides & Associates believe that acids would have been detected at the subject site given that pH was analysed in a number of samples submitted for laboratory analysis. The pH values ranged between 8.5 and 12 pH units at the subject site. Diomides & Associates can not provide further certainty that acids were not used for the area immediately south of the subject site.
7	3.6 Site History pg11	a) Please check the dates related to the information provided by Mr Tedge. Based on the information provided in your report, Mr Tedge would be about 113 years old. A typographical error was made in paragraph two on page 11 of the

		Diomides & Associates 2012 report. Mr. Tedge indicated that he started working at the subject site during the 1930s and that production at the subject site began in approximaltey 1915/1916. Mr. Tedge is believed to have been over 90 years old in 2009.
		b) The information provided by Mr Tedge, on past activities, would suggest that varnishes and thinners would have been used on site. While, perhaps, not considered chemicals, these materials are potential sources of contaminants such as petroleum hydrocarbons and MAH. Based on the information provided by Mr. Tedge, Marbut Mouldings used paints at the subject site to hand paint the timber products on a non-routine basis. Diomides & Associates are not able to provide further certainty that varnishes and thinners were in fact used at the subject site between the years from approximaltey 1915 to 1970s. However, Diomides & Associates believe that varnishes and thinners would have been detected at the subject site given that petroleum hydrocarbons and MAH were analysed in all samples submitted for laboratory analysis. The petroleum hydrocarbons and MAH concentrations were below laboratory limits of reporting in most cases or were well below the adopted criteria in cases were traces were reported. Diomides & Associates can not provide further certainty that varnishes and thinners were not used for the area immediately south of the subject site.
8	3.6 Site History pg12	The report notes the presence of a number of former clay quarries in the vicinity which, from the aerial photos, appear to have been filled. As a minimum, there should be a desktop assessment of the likelihood of landfill gas generation and potential impact on the site. Some of these quarry sites have been the subject of environmental audits. A desktop study was conducted for former nearby quarries located near the subject site based on Melbourne and Metropolitan Board of Works (MMBW) plans from 1905 to 1909 (see additional MMBW plans attached). The following former quarries were identified near the subject site: (i) Three former quarries were located approximately 105, 170 and 180 metres south, south to south-west and south to south-east of the subject site, respectively. Limited information about these former quarries could be found and it is not known what sort of material was used to backfill these former quarries. It is believed from aerial photographs that these quarries were already backfilled in the 1951 aerial photograph and have been occupied by commercial/industrial properties for many years. A search of EPA Victoria's List of Certificates and Statements of Environmental Audit indicates that an audit has not been undertaken for these sites/areas. Even though these former quarries are located within a 500 metre buffer of the subject site, EPA Publication 1338 (May 2010) states that "landfill gas is a potential risk that exists for up to 30 years, depending on the type and placement of waste. A buffer needs to be maintained until the risk has diminished." Given that these former quarries were backfilled more than 60 years ago it is considered that any landfill gas has significantly diminished; (ii) A large former quarry was located approximately 275 metres south to south-west of the subject site and was occupied by Hoffman Brickworks Number 1 site. It is believed from aerial photographs that the large quarry was still visible in the 1951 aerial photograph, however, the quarry had been backfilled in

		the 1968 aerial photograph. A search of EPA Victoria's List of Certificates and Statements of Environmental Audit indicates that a number of statutory environmental audits have been performed for various stages or areas of the former Hoffman Brickworks Site, including CARMs file numbers 40625-1 dated 19/07/2002, 51415-1 dated 29/12/2003, 51415-2 dated 02/03/2004, 51415-3 dated 18/04/2005, 51415-4 dated 26/10/2012. Diomides & Associates reviewed most of these reports except for 51415-4 which was not available for review on the EPA Victoria website. Information obtained from the audit reports indicates that Hoffman Brickworks established the Number 1 works site in 1870 and removed clay from the quarry from approximately 1890 to the 1930s. In 1948, the Number 1 works clay pit was sold to the City of Brunswick and backfilled with putrescible waste up until the late 1960s (i.e. the 1968 aerial photograph indicates quarry had been filled). During the 1970s, the area above the former quarry was redeveloped into park land called Clifton Park. Even though this former quarry is located within a 500 metre buffer of the subject site, EPA Publication 1338 (May 2010) states that "landfill gas is a potential risk that exists for up to 30 years, depending on the type and placement of waste. A buffer needs to be maintained until the risk has diminished." Given that the former quarry was backfilled more than 45 years ago it is considered that any landfill gas has significantly diminished; (iii) A former quarry was located approximately 400 metres south-east of the subject site. Limited information about this former quarry could be found and it is not known what sort of material was used to backfill this former quarry. It is believed from aerial photographs that this quarry was still visible in the 1951 aerial photograph, however, the quarry had been backfilled in the 1968 aerial photograph and has been occupied by commercial/industrial properties for many years. A search of EPA Victoria's List of Certificates and Statements of Environmental Audit indicates that an audit has not been undertaken for this site/area. Even though this former quarry is located within a 500 metre buffer of the subject site, EPA Publication 1338 (May 2010) states that "landfill gas is a potential risk that exists for up to 30 years, depending on the type and placement of waste. A buffer needs to be maintained until the risk has diminished." Given that this former quarry was backfilled more than 45 years ago it is considered that any landfill gas has significantly diminished; (iv) A former quarry was located approximately 450 metres south-west of the subject site and may have been associated with the Hoffman Brickworks site. It is believed from aerial photographs that the large quarry was still visible in the 1951 aerial photograph, however, the quarry had been backfilled in the 1968 aerial photograph. The site has been occupied by commercial/industrial property for many years and has since been redeveloped for residential apartments. A search of EPA Victoria's List of Certificates and Statements of Environmental Audit indicates that a statutory environmental audit was undertaken at 452-462 Victoria Street, Brunswick – CARMs Number 49972-1 dated 22/06/2004. Diomides & Associates reviewed this audit report which indicated that a former clay quarry was located in the south-western corner of the site. Fill material within the former quarry contained elevated concentrations of copper, lead, manganese, polycyclic aromatic hydrocarbons and TPH > C9. The fill material in the former quarry contains asbestos cement

		fragments, glassy slag, green crumbly material, steel, wood, brick, concrete and PVC. The former quarry was believed to have been backfilled in the early 1960s with waste as per the description above. The former quarry has since been capped with 0.5 metres of clean chemically tested clay. A vapour barrier has been proposed for buildings constructed over the former quarry area to allow for venting. A groundwater investigation indicated that the groundwater beneath the quarry was contaminated with lead, copper and zinc. A CUTEP was performed and EPA Victoria has identified the site as being within a Groundwater Quality Restricted Use Zone (GQRUZ). Even though this former quarry is located within a 500 metre buffer of the subject site, EPA Publication 1338 (May 2010) states that "landfill gas is a potential risk that exists for up to 30 years, depending on the type and placement of waste. A buffer needs to be maintained until the risk has diminished." Given that the former quarry was backfilled more than 50 years ago it is considered that any landfill gas has significantly diminished; (v) A large former quarry was located approximately 550 metres south to south-west of the subject site and was occupied by Hoffman Brickworks Number 2 site. It is believed from aerial photographs that the large quarry was still visible in the 1951 aerial photograph and was partially backfilled in the 1968 aerial photograph. A search of EPA Victoria's List of Certificates and Statements of Environmental Audit indicates that a number of statutory environmental audits have been performed for various stages or areas of the former Hoffman Brickworks Site, including CARMs file numbers 40625-1 dated 19/07/2002, 51415-1 dated 29/12/2003, 51415-2 dated 02/03/2004, 51415-3 dated 18/04/2005, 51415-4 dated 26/10/2012. Diomides & Associates reviewed most of these reports except for 51415-4 which was not available for review on the EPA Victoria website. Information obtained from the audit reports indicates that Hoffman Brickworks established the Number 2 works site in 1884 and removed clay from the quarry from approximately 1890 to the 1930s. In 1958, the Number 2 works clay pit was sold to the City of Melbourne and backfilled with unknown fill material up until the 1970s (i.e. the 1968 aerial photograph indicates quarry had been partially filled). During the 1970s or 1980s, the area above the former quarry was redeveloped into park land called Gilpin Park. It should be pointed out that this former quarry is located outside the 500 metre buffer from the subject site. EPA Publication 1338 (May 2010) states that "landfill gas is a potential risk that exists for up to 30 years, depending on the type and placement of waste. A buffer needs to be maintained until the risk has diminished." Given that the former quarry was backfilled more than 35 years ago and is located more than 500 metres away, it is considered that any landfill gas has significantly diminished.
9	Table 1, pg16	There is an apparent 10-year gap in the site history, between 1914 and 1924. The summary table appears to show a gap between the years from 1914 to 1924, however, communications with Mr. Tedge indicate that Marbut Moulding Pty Ltd first began production at the subject site in approximately 1915/1916 and continued to occupy the subject site until the 1970s.
10	Table 2 -pg17	a) Given the early stage at which the site was developed for industrial uses, it is unlikely that that its use for farming would have

		contributed any of the potential contaminants listed for that activity. Point noted. Diomides & Associates agree with this comment but included all potential contaminants of interest.
		b) Asbestos is listed as a potential contaminant in filling at the site, but no analysis is listed in Table 3. Can this be explained, please. Diomides & Associates did not analyse any samples for asbestos during the June 2012 field investigation works given that no visible asbestos fragments were observed as per the test pit/borehole logs attached as Appendix I of the Diomides & Associates June 2012 report. It should be pointed out that a fragment of possible asbestos was observed during the field work conducted for the Diomides & Associates preliminary report dated May 21, 2009. The cement sheet fragment recovered from BH2 at a depth of 0.6 metres below ground level and was sent in for analysis. The fragment was identified as chrysotile asbestos.
11	4.2 Drilling, test pits and sampling pg18-20	Sampling procedures do not seem to be described here. Are they described elsewhere in the report? Please respond. Soil samples were recovered from the test pit walls in test pits that were less than one metre deep. For test pits greater than one metre in depth, samples were recovered from the centre of the excavator bucket. In cases were mechanical drilling/excavation equipment were not able to fit, such as indoor areas in this case, Diomides & Associates used a 100 millimetre hand auger to recover samples. The samples were recovered directly off the hand auger and placed into appropriate sample jars. In each case the sample jar and lid were used to recover the sample and disposable latex gloves were worn by the field operators during all field work and were replaced prior to the recovery of each sample. No other sampling equipment was utilised during field investigation works which meant that a single rinsate sample was recovered off the hand auger after one of the cleaning procedures for quality control purposes. Cross contamination issues were not considered to be an issue in the field sampling stage or during the transportation stage, however, a field blank sample was analysed to determine the presence of any potential cross contamination issues during the field sampling stage of field work.
12	7.2 Results pg28	The beneficial use 'maintenance of highly modified ecosystems" has more than "limited relevance" at the site. It is a protected beneficial use for High Density residential use, which the SEPP (PMCL) describes as making "..*maximum use of available land space and there is minimal access to soil*.." This description is, appropriately, applied to the proposed development, but the protected beneficial use is still relevant. Diomides & Associates understand your concern but clearly state that in this case maintenance of highly modified ecosystems has “limited” relevance given the context of the proposed development. This does **not** mean there is “no relevance” and should not be interpreted in that way. It should also be pointed out in this situation only one sample (i.e. BH2 0.1-0.2 metres) had a marginally elevated arsenic concentration above NEPM EIL criteria. All other concentrations were below NEPM EIL criteria.
13	7.2 Results pg32	The use of the terms 'detection limit' and "method detection limit" is not appropriate in these circumstances. mgt-LabMark quotes results as "less than the limit of reporting". The limit of reporting is not the same as the method detection limit.

		Point noted.
14	Table 4 pg33	That sampling was conducted on a systematic basis across the site is stated as evidence that data representivity was achieved. However, the question is whether or not the samples taken represent the conditions at the site. So, for example, were samples taken from each separate profile in the soil horizon at each location? Was the filling material homogeneous or heterogeneous, and what action was taken to ensure representivity in the latter case? A soil sample was taken from each different soil horizon in each test pit or borehole location as reported in the test pit/borehole logs attached as Appendix I of the Diomides & Associates June 2012 report. In reality, fill material is not always homogeneous which means that field personnel have to sample the material that best represents the bulk of that particular fill horizon. In all cases Diomides & Associates strive to recover soil samples that best represent the material being sampled for each of the different soil horizons.
15	7.2 Results pg34	a) Please consider the impact of soil pH on the beneficial use Buildings and Structures. All protected beneficial uses must be considered within the audit context. The results of soil sampling work conducted at the subject site indicate that pH levels were all above the adopted criteria of 5.5 pH units. These results indicate that there is no concern that the beneficial use of Buildings and Structures is precluded.
		b) In discussing contaminant concentration data at BH 2 and TP 3, arsenic and lead concentrations are described as "elevated". Are they elevated compared to background concentrations, or some other benchmark? They are elevated above NEPM EIL and NEPM HIL A criteria respectively.
16	Appendix K -Laboratory results	Sulfate results are reported as 'Sulphate (S)",but are compared with the NEPM EIL value, which is for sulfate as SO4 = . The data in the Table of Results should be adjusted accordingly. MGT-Labmark has reported sulphate as S instead of SO_4 which is simply a difference in calculation and reporting. In the calculation for sulphate as S an atomic weight of 32.065 $g.mol^{-1}$ is used where as in the calculation for sulphate as SO_4 a molecular weight of 96.0626 $g.mol^{-1}$ is used. The sulphate as S result reported by MGT-Labmark can be converted to sulphate as SO_4 by multiplying by 96.0626 $g.mol^{-1}$ and dividing by 32.065 $g.mol^{-1}$ which equates to a factor of approximately 3. Sulphate as SO_4 can be converted for the following results: (i) for BH1 0.15-0.25 it can be converted to 150 mg/kg; (ii) for TP3 015-0.25 it can be converted to < 30 mg/kg; and, (iii) for TP6 0.4-0.5 it can be converted to 36 mg/kg. These results for sulphate as SO_4 can be compared to the NEPM EIL criteria.
		There is an anomalous result reported for lead in TP3. The concentration from 0.3-0. 4 m, in natural soil, is great than the concentration in the sample in filling directly above it, where the lead concentration was quite low. Further sampling may be required to investigate this.

		Diomides & Associates agree that this result is anomalous given that lead in the fill material (immediately above) has a much lower concentration. However, given that the result is below NEPM EIL and NEPM HIL D criteria it would not appear justified to investigate this result with further sampling.

Yours sincerely,
DIOMIDES & ASSOCIATES PTY LTD

DR COSTA DIOMIDES
Senior Environmental Scientist

STEPHEN DIOMIDES
Director
Lead Environmental Auditor – Site Contamination
Certificate No. 005455
RABQSA Register of Certified Auditors

Appendix H

Priority Sites Register Extract

Extract of EPA Priority Site Register

EPA VICTORIA

**** Delivered by the LANDATA® System, Department of Sustainability and Environment ****

PROPERTY INQUIRY DETAILS:

STREET ADDRESS: 101 - 105 HOPE STREET
SUBURB: BRUNSWICK
MUNICIPALITY: CITY OF MORELAND
MAP REFERENCE: Melways 40th Edition, Street Directory, Map 29 Reference F6

DATE OF SEARCH: 4th July 2013

PRIORITY SITES REGISTER REPORT:

A search of the Priority Sites Register for the above map reference, corresponding to the address given above, has indicated that this site is not listed on, and is not in the vicinity of a site listed on the Priority Sites Register at the above date.

IMPORTANT INFORMATION ABOUT THE PRIORITY SITES REGISTER:

You should be aware that the Priority Sites Register lists only those sites for which EPA has requirements for active management of land and groundwater contamination. Appropriate clean up and management of these sites is an EPA priority, and as such, EPA has issued either a:

Clean Up Notice pursuant to section 62A, or a
Pollution Abatement Notice pursuant to section 31A or 31B

of the Environment Protection Act 1970 on the occupier of the site to require active management of these sites.

The Priority Sites Register does not list all sites known to be contaminated in Victoria. A site should not be presumed to be free of contamination just because it does not appear on the Priority Sites Register.

Persons intending to enter into property transactions should be aware that many properties may have been contaminated by past land uses and EPA may not be aware of the presence of contamination. EPA has published information advising of potential contaminating land uses. Municipal planning authorities hold information about previous land uses, and it is advisable that such sources of information also be consulted.

For sites listed on the Priority Sites Register, a copy of the relevant Notice, detailing the reasons for issue of the Notice, and management requirements, is available on request from EPA for $8 per Notice.

For more information relating to the Priority Sites Register, refer to EPA contaminated site information bulletin: Priority Sites Register & Contaminated Land Audit Site Listing (EPA Publication 735). For a copy of this publication, copies of relevant Notices, or for more information relating to sites listed on the Priority Sites Register, please contact EPA as given below:

EPA Information Centre
Herald & Weekly Times Tower
40 City Road, Southbank 3006
Tel: (03)9695 2700 Fax:(03)9695 2710

Appendix I

Current Titles and Property Information

Department of Sustainability and Environment
State Government Victoria
Copyright State of Victoria. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act and for the purposes of Section 32 of the Sale of Land Act 1962 or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. The State of Victoria accepts no responsibility for any subsequent release, publication or reproduction of the information.

HISTORICAL SEARCH STATEMENT Land Victoria

Produced 14/03/2013 02:37 PM

Volume 11365 Folio 587
Folio Creation: Created as a computer folio
Parent titles :
 Volume 08853 Folio 874
 Volume 08874 Folio 438

STATEMENT END

VOTS Snapshot

VOLUME 11365 FOLIO 587
124042554808B
Produced 21/07/2012 07:42 am

LAND DESCRIPTION

Lot 1 on Plan of Subdivision 626893Q.
PARENT TITLES :
Volume 08853 Folio 874 Volume 08874 Folio 438
Created by instrument PS626893Q 21/07/2012

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
RODEN STREET PTY LTD of 7 YORK PLACE CARLTON VIC 3053
PS626893Q 21/07/2012

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AG871761P 17/11/2009
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 PS626893Q FOR FURTHER DETAILS AND BOUNDARIES

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PLAN OF SUBDIVISION

STAGE No. ———

LRS USE ONLY
EDITION 1

PS626893Q
06/07/2012 $1,096.30 PS

LOCATION OF LAND

PARISH: JIKA JIKA

CROWN PORTION: 109 (PT)

TITLE REFERENCE: VOL.08853 FOL.874
VOL.08874 FOL.438

LAST PLAN REFERENCE/S: LP 089346 (LOTS 1 &2)

POSTAL ADDRESS: (At time of subdivision) No. 101-105 HOPE STREET BRUNSWICK 3056

MGA Co-ordinates (of approx centre of land in plan) E 319 835 N 5 818 360 ZONE: 55

COUNCIL CERTIFICATION

COUNCIL NAME: MORELAND CITY COUNCIL REF: SP/2009/108

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 of the Subdivision Act 1988 ~~has~~/has not been made.

(ii) The requirement has/~~has not~~ been satisfied.

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

~~(iv) The requirement has been satisfied for ....~~

Council Delegate
~~Council Seal~~
Date 19/6/2012 Signature GRAEME LOWELL Print Name

~~This plan is re-certified under Section 11(7) of the Subdivision Act 1988.~~

~~Council Delegate~~
~~Council Seal~~
~~Date / /~~ ~~Signature~~ ~~Print Name~~

VESTING OF ROADS AND/OR RESERVES

IDENTIFIER	COUNCIL/BODY/PERSON
NIL	NIL

NOTATIONS

STAGING This ~~is~~/is not a staged subdivision.
Planning permit No: SP/2009/108

DEPTH LIMITATION DOES NOT APPLY

SURVEY THIS PLAN IS / ~~IS NOT~~ BASED ON SURVEY.

OTHER PURPOSES OF THIS PLAN: 1. REMOVAL OF THE SEWER EASEMENT COLOURED BLUE AND NAMED E-1 ON LP 080707.
2. MERGER OF THE PARTY WALL EASEMENTS COLOURED YELLOW AND GREEN AND NAMED E-1 AND E-3 ON LP 089346.

GROUNDS FOR REMOVAL: MORELAND CITY COUNCIL PLANNING PERMIT No.: SP/2009/108 (as amended).

LRS USE ONLY

STATEMENT OF COMPLIANCE/ EXEMPTION STATEMENT

RECEIVED ☑ DATE 06 / 07 / 12

PLAN REGISTERED

TIME 7:42am

DATE 21/ 07 / 12

G Venn

Assistant Registrar of Titles

EASEMENT INFORMATION

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

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of
E-1	PARTY WALL	0.13	THIS PLAN	RESPECTIVE ADJOINING LOTS

Land Development Consulting
Suite 20, The Clocktower
255 Drummond Street,
Carlton, 3053
Phone 9347 5655 Fax 9347 5054

LICENSED SURVEYOR(PRINT) MARK CHARLES TOMKINSON
SIGNATURE
DATE 27/1/12
REF 3403 PS
VERSION E

DATE 19/6/2012
COUNCIL DELEGATE SIGNATURE

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm

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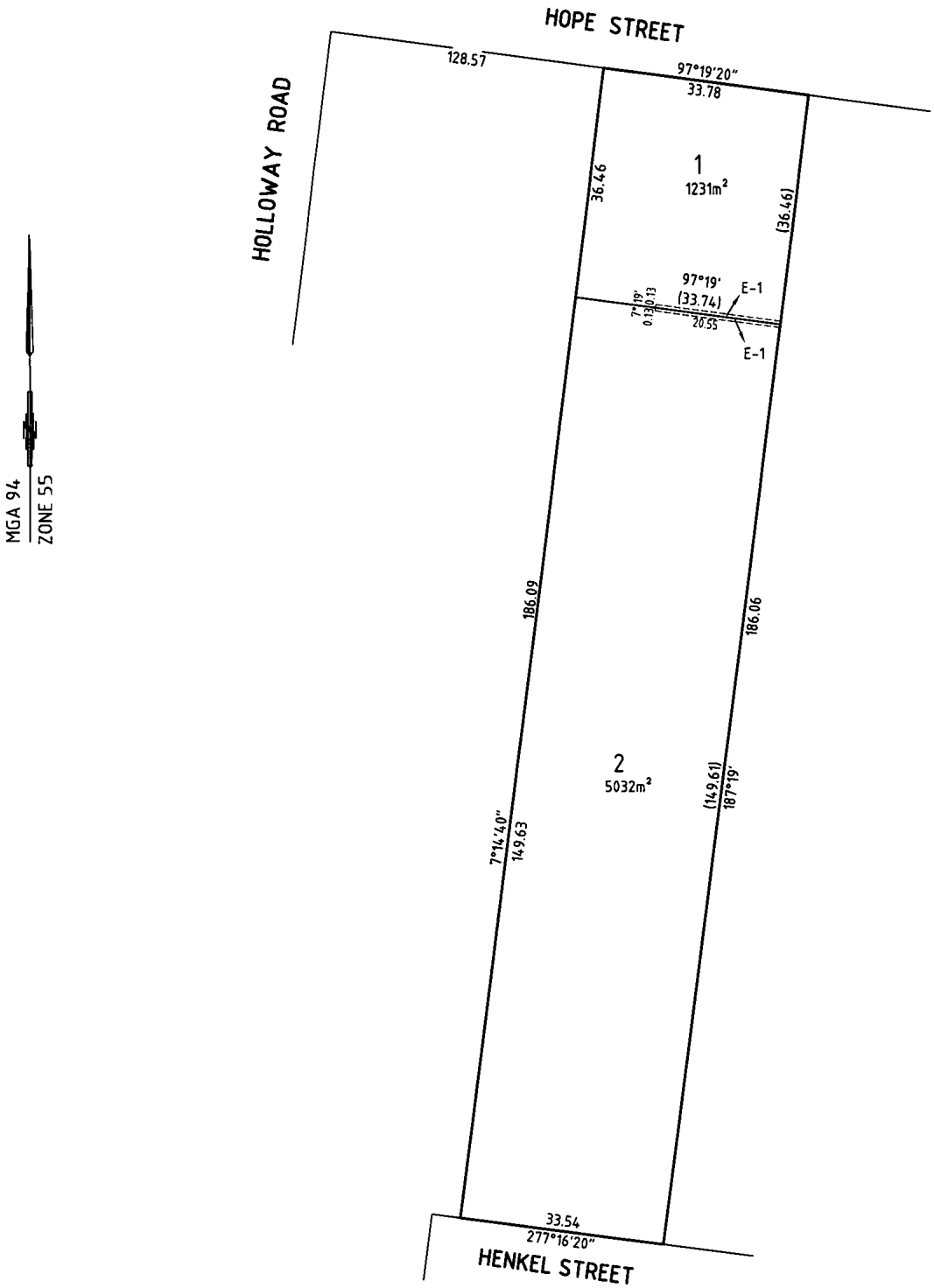
PLAN OF SUBDIVISION

STAGE No. —

PLAN NUMBER PS 626893Q



Land Development Consulting Suite 20, The Clocktower 255 Drummond Street, Carlton, 3053 Phone 9347 5655 Fax 9347 5054	SCALE 0 5 10 15 20 30 LENGTHS ARE IN METRES SCALE 1:750 ORIGINAL SIZE : A3	LICENSED SURVEYOR : MARK CHARLES TOMKINSON SIGNATURE ..... DATE 27/1/12 REF 3403 PS VERSION E	DATE 19/6/2012 COUNCIL DELEGATE SIGNATURE SHEET 2 OF 2 SHEETS

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150mm

Property Report from www.land.vic.gov.au on 08 March 2013 11:45 AM

Address: 101-105 HOPE STREET BRUNSWICK 3056
Lot / Plan: Lot 1 PS626893
SPI (Standard Parcel Identifier): 1\PS626893
Local Government (Council): MORELAND **Council Property Number:** 81069
Directory Reference: Melway 29 F6

This property is not in a designated bushfire prone area.
No special bushfire construction requirements apply. Planning provisions may apply.
Further information about the building control system and building in bushfire prone areas can be found on the Building Commission website www.buildingcommission.com.au

Parcel Details

Lot/Plan or Crown Description	SPI
Lot 1 PS626893	1\PS626893

State Electorates

Legislative Council: NORTHERN METROPOLITAN (2005)
Legislative Assembly: BRUNSWICK (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: CITIPOWER (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zones: INDUSTRIAL 3 ZONE (IN3Z)
SCHEDULE TO THE INDUSTRIAL 3 ZONE
MIXED USE ZONE (MUZ)
SCHEDULE TO THE MIXED USE ZONE
Planning Overlays: ENVIRONMENTAL AUDIT OVERLAY (EAO)
SPECIAL BUILDING OVERLAY (SBO)
SPECIAL BUILDING OVERLAY SCHEDULE (SBO)

Further Planning Information

Planning scheme data last updated on 7 March 2013.

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, local, particular and general provisions of the local planning scheme that may affect the use of the land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & 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

The Planning Property Report includes separate maps of zones and overlays

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 Planning Maps Online

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

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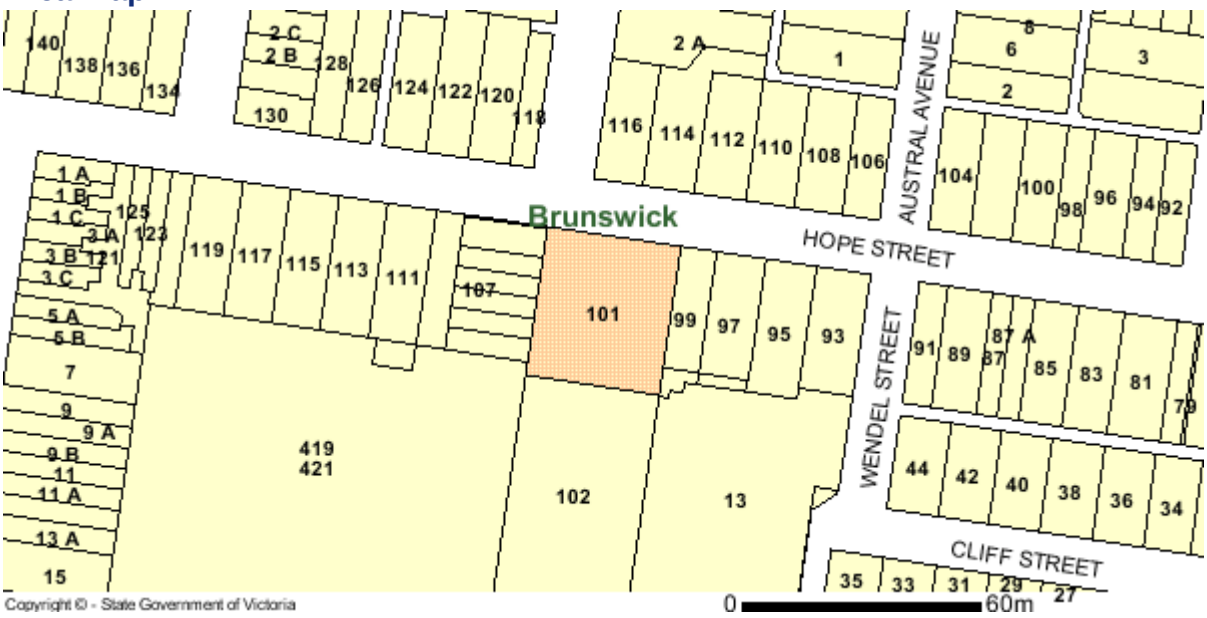
Area Map



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