Stage 1
Preliminary Environmental Site Assessment

Townson Road Precinct
Marsden Park NSW 2765

Part Lot 1 DP88530
Lots 5, 6, 7, 8, 9, DP27536
Part Lots 44, 45, 46, 47 DP1175138

Prepared for

Townson Road Landowners Group

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September 2013

Revision R01

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Quality Information

Document	**Stage 1 Preliminary Site Assessment**
Job Reference	DL3164 – Townson Road, Marsden Park, NSW, 2765
Date	30th September 2013
Prepared by	Josh Crawford Author _____
Reviewed by	Anthony Richard DLA Reviewer _____

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R01	30th September 2013	**Townson Road Marsden Park NSW 2765 Stage 1 Report**	**Simon Spyrdz** Deputy Sydney Regional Manger	_____

EXECUTIVE SUMMARY

DLA Environmental (DLA) was commissioned by the Townson Road Landowners Group to prepare a Stage 1 - Preliminary Environmental Site Assessment on the properties identified as Part Lot 1 DP885230, Lots 5, 6, 7 8 and 9 DP27536 and Part Lots 44, 45, 46 and 47 DP1175138 at Townson Road, Marsden Park, NSW, 2765 (the Site). The Site is located within the Blacktown City Council Local Government Area and has an approximate area of 322,000m^2 (32.2ha). The land is currently occupied by a recreational paintball facility in the south-west of the Site and a rural residential property in Lot 9 in the north-east, with remaining areas predominantly covered with intermittently spaced natural vegetation.

This Stage 1 Preliminary Environmental Site Assessment forms part of due diligence associated with a proposed redevelopment to determine the end land-use suitability of the property. The project objectives of the Stage 1 Assessment are to conduct a review of all existing information on the Site and to assess the possibility for past and present site activities which may have caused contamination to soils or groundwater underlying the site. The assessment conducted a historical investigation of the potential environmental impacts and was supplemented with sixteen (16) soil samples.

The WorkCover dangerous goods search and other aspects of the desktop study found that the Site is not encumbered by any contaminated land notices and does not have a registered history of storing any dangerous goods on-site that have the potential to contaminate and detrimentally affect the Site.

A search of the New South Wales Natural Resources Atlas indicated no evidence of salinity hazards or dryland salinity indicators within the Site boundaries or land surrounding the Site. The Site is located in an area described as ‘moderate salinity potential’ in the DIPNR Salinity Potential in Western Sydney 2002 Map. Therefore, soil salinity and aggressivity is not a concern for the intended land use of the Site and salinity and aggressivity analysis of soils is not believed to be necessary.

A review of the historical aerial photos indicates that with the exception of a few small clearings, the majority of the investigation site has remained covered with natural vegetation up until this point. A circular dirt racing/motorcycle track was in use from the 1970s through til the 1990s, with the south west corner of the Site utilised as part of a paintball facility since that time. A small residence on Lot 9 in the north east corner of the Site has been present since the 1980s. The premises are currently utilised an office for a refrigerated transportation business

Concentrations of vTRH, BTEX and PAH were not detected above the LOR in any of the samples, and therefore comply with the adopted site acceptance criteria. All eight (8) heavy metals analysed indicate no exceedances of the criteria were recorded and complied with relevant NEPM Guidelines

The recorded concentration of 400mg/kg for TRH>C_{16}-C_{34} (F3) at S12 exceeds the Ecological Screening Level for coarse soil texture of 300mg/kg for Urban residential and public open space. Chemicals in the F3 fraction range are non-volatile and therefore not of concern for vapour intrusion and are below the criteria for human health exposure. As S12 is located outside the riparian zone, it is not considered a significant risk to future plant growth in the area following development.

Asbestos containing fragments observed on the surface of the northern batter of the dam on the property at 68 Townson Road will require remediation. Following removal, a Clearance Certificate should be provided in accordance with the *How to Safely Remove Asbestos* Code of Practice (Safe Work Australia, 2011).

The conclusion of this Stage 1 Environmental Site Assessment Report is that there is a low risk of contamination and **the Site can be made suitable for its intended land use** consistent with the definition of Column A – *Residential with Garden / Accessible Soil* land use provided by the National Environment Protection Council (NEPC) in Table 1A(1) of the NEPM 2013 Guidelines **following the issuing of an Asbestos Clearance Certificate.** If the land use is changed in the future the Site Assessment should be reviewed to ensure compliance with suitable soil investigation levels for appropriate end land use zoning.

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1.0 INTRODUCTION

1.1 General

DLA Environmental (DLA) was commissioned by the Townson Road Landowners Group to prepare a Stage 1 - Preliminary Environmental Site Assessment on the properties identified as Part Lot 1 DP88530, Lots 5, 6, 7, 8 and 9 DP27536 and Part Lots 44, 45, 46 and 47 DP1175138, Townson Road, Marsden Park, NSW, 2765 (the Site).

Refer to **Figure 1** - *Site Location*.

This assessment was conducted in accordance to State Environmental Planning Policy (SEPP) 55 - *Remediation of Land* and the NSW Environment Protection Authority's *Guidelines for Consultants Reporting on Contaminated Sites* as part of due diligence associated with a proposed subdivision of the property to determine if any previous land uses have contaminated the site.

1.2 Objectives of the Assessment

The NSW Environment Protection Authority (EPA) indicates that a Preliminary Site Environmental Investigation should:

- Identify all past and potentially contaminating activities;
- Identify potential contamination types;
- Discuss the site condition;
- Provide a preliminary assessment of site contamination; and
- Assess the need for further investigations.

The proposed investigation program and this report was designed to be suitable for due diligence purposes so the document can be incorporated in sales contracts, for redevelopment purposes, or the ongoing management of the Site. It is suitable for review by the EPA, Department of Natural Resources (DNR) and Blacktown City Council. In particular the document meets the requirements of SEPP55 (Environmental Planning & Assessment Act, 1979).

The Stage 1 Preliminary Environmental Site Assessment has the same status as *a Preliminary Investigation* in terms of that definition provided within SEPP55 relating to the planning aspects of contamination assessments.

1.3 Data Quality Objectives

The National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1) and Australian Standard (AS) 4482.1-2005 recommend that data quality objectives (DQOs) be implemented during the investigation of potentially contaminated sites. The DQO process described in AS 4482.1-2005 *Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil Part 1: Non-Volatile and Semi-Volatile Compounds* outlines six (6) distinct steps to outline the project goals, decisions, constraints and an assessment of the project uncertainties and how to address these when they arise. They define the quality and quantity of data needed to support decisions relating to the environmental condition of a site. They also outline the defining criteria that a data collection design should satisfy, including when, where, if and how many samples to be collected.

The DQO's for the investigations were to:

State the Problem.

Determine, from a contamination point of view, if the land is suitable to be developed for Residential with Garden / Accessible Soil land use in accordance with the requirements of *State Environmental Planning Policy No. 55* and the *Environmental Planning and Assessment Act. 1979*. This includes researching previous site investigations, historical searches (titles, landuse of site and adjacent sites, and aerial photographs), identification of chemicals of concern, media they inhabit and possible migration pathways (to and from the site), potential exposures to human and/or environmental receptors, and concerns with the potential clean up and desired future landuse of the property.

> *Investigations into the site need to determine if contamination has the potential to be present from previous land use activities or off site sources that could present an unacceptable risk to human health or the environment and prevent the site being suitable for the intended land use.*

Identify the Decision.

The decisions to be made on the contamination and the new environmental data required include considering relevant contamination sources to the Site from a desktop study of the site history and potential contamination sources supplemented by a small number of soil samples.

Identify Inputs to Decision.

This step requires the identification of the factors that may, or may not have influenced the Site to make it unsuitable for the intended land use. Inputs include:

- Determine the lateral extents of the site under investigation;
- Undertake appropriate searches of the site to determine any recorded history of detrimental effects on the Site; and
- Undertaking a review of historical aerial photographs to identify previous land use activities on site.

Define the Study Boundaries.

Specify the spatial and temporal aspects of the environmental media that the data must represent to support decision. To identify the boundaries (both spatial and temporal) of the investigation and to identify any restrictions that may hinder the assessment process. This includes on and off site inspections and discussions with informed individuals.

Refer to **2.0** – Site Description, **Figure 2** - Site Layout.

Develop a Decision Rule.

To define the parameter(s) of interest, specify the action level and provide a logical basis for choosing additional actions.

Specify Limits on Decision Errors.

Specify the decision-maker's acceptable limits on decision errors, which are used to establish performance goals for limiting uncertainties in the data. Incorrect decisions are caused by using data that is not representative of site conditions because of sampling or

analytical error. Supplementary sampling was undertaken as part of the Stage I Desktop Study.

1.4 Statutory Framework

The environmental planning statutes in New South Wales, which most likely apply are:

Contaminated Land Management Act 1997;

Protection of the Environment Operations Act 1997;

Dangerous Goods Act 1975;

Waste Minimisation and Management Act 1995;

Environmental Planning and Assessment Act 1979, and

Local Government Act 1993.

In addition, regulations and planning instruments made under these Acts may also apply.

The *Protection of the Environment Operations Act* (POEO), 1997 commenced operation on 1st July 1999 and has repealed the following Acts:

The Clean Waters Act 1970;

The Clean Air Act 1961;

The Noise Control Act 1975;

The Environmental Offences and Penalties Act 1989, and

The Pollution Control Act 1970.

The Act also incorporates the major regulatory provisions of *the Waste Minimisation and Management Act* 1995.

The repealed Acts are incorporated into the POEO Act. Thus, regulations made under the repealed Acts are now regulations under the POEO Act or until otherwise amended and licences issued under the repealed Acts are deemed to be licences under the POEO Act. The POEO Act provides a common licence to cover emissions to all environmental media. The Act lists certain “scheduled activities” which have to be licensed.

The *Contaminated Land Management Act*, 1997 specifies the legal requirements for the registration, investigation and remediation of contaminated land, and for the registration and accreditation of site auditors. It repeals the requirements of the *Environmentally Hazardous Chemicals Act*, 1985 in relation to audits and the accreditation of site auditors.

The *Environmental Planning and Assessment Act*, 1989 gives local authorities the power to regulate development within their areas of responsibility and to impose specific consent conditions, which cover environmental issues. In addition, the *Local Government Act* 1993 requires approval from Council for certain works/activities to be obtained. This Stage 1 Preliminary Environmental Site Assessment was conducted in accordance with SEPP55 to support a development application for the re-development of the property (Site).

1.5 Scope of Work

The investigation and assessment was conducted using the following methods:

- *Search and review of records and site plans available locally and from State Regulatory Authorities, including WorkCover, Department of Lands and OEH;*
- *Review of historical aerial photographs available from the Land Information Centre;*
- *Reviewing all environmental conditions of the Site including the geology and hydrogeology; and*
- *Providing a comprehensive overview of the Sites past and current land uses and potential contamination issues.*

The assessment and report has been conducted in accordance with the following:

- *The National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1) (NEPM), National Environment Protection Council;*
- *NSW OEH Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites, August 2011; and*
- *NSW EPA Contaminated Sites: Guidelines for the NSW Site Auditor Scheme, second edition 2006.*

2.0 SITE DESCRIPTION

2.1 Site Identification

The Site is located approximately thirty-seven (37) kilometres north-west of the Sydney CBD at Townson Road, Marsden Park, NSW. (Part Lot 1 DP88530, Lots 5, 6, 7, 8 and 9 DP27536 and Part Lots 44, 45, 46 and 47 DP1175138). The land is currently occupied by a recreational paintball facility in the south-west of the Site and a rural residential property in Lot 9 in the north-east, with remaining areas predominantly covered with intermittently spaced natural vegetation. The Site is located within the Blacktown City Council Local Government Area and has an area of approximately 322,000m^2 (32.2ha).

Bells Creek flows through the Site from the southern boundary to the northern boundary. Land to the east of Bells Creek is predominantly used for the grazing of cattle and goats with five (5) paddocks present. West of Bells Creek is used for a variety of land uses, including residential houses, a warehouse structure, junkyard, an excavation business and a driver/operator training business.

Refer to **Figure 1** – Site Location and **Figure 2** – Site Layout with Sample Locations.

2.2 Proposed Future Land use

The Site is to be sub-divided into residential blocks. This development scenario is consistent with the definition of Column A – *Residential with Garden / Accessible Soil* land use provided by the National Environment Protection Council (NEPC) in Table 1A(1) of the NEPM 2013 Guidelines. The Site Criteria has been adopted as it is the most sensitive criteria and applicable to the proposed future land use.

2.3 Environmental Setting

2.3.1 Boundaries and Surrounding Land Use

Property boundaries consist of Townson Road to the north, Richmond Road and Bells Creek riparian corridor to the west, Stonecutter Ridge Golf Course and CSR facility to the east with rural residential properties beyond. The area to the south has recently been cleared in preparation for residential development. The surrounding land use is predominantly rural

industrial and residential. The northern, eastern and southern boundaries of the Site are marked by tall, post wire metal fencing.

2.3.2 Site Topography and Hydrology

The Site is relatively flat, with some slight undulations and low rounded hills, sloping gently from east to west. Surface water drainage is expected to follow the natural contours toward Bells Creek, which flows through the site to the north joining Eastern Creek and eventually the Hawkesbury River, or one (1) of the two (2) dams on site.

A search of the NSW OEH groundwater works database indicated there are five (5) registered bores within 1km of the Site. Information is only available for one (1) of these bores. The Bore depth was 20m with no details of water bearing zones recorded.

Groundwater beneath the Site is not expected to be of very high quality due to moderate salinity, typical of Wianamatta group shale aquifers. The hydraulic conductivity of the Wianamatta Group of rocks is expected to be extremely low, in the order of $5E^{-8}$ m/day to $5E^{-6}$ m/day.

Refer to **Appendix C** – Groundwater Bore Works Search

2.3.3 Site Geology and Soils

The Soil Landscape Map of Penrith (Soil Landscape Series Sheet 9030, Scale 1:100,000, 1989), prepared by the Department of Land and Water Conservation of NSW, indicates that the majority of the landscape at the Site is likely to be belonging to the Blacktown landscape area, with a small area on either side of Bells Creek belong to the South Creek landscape.

The soils investigated were typical of a Blacktown Soil Landscape associated with gentle rises on Wianamatta group shales. Soils were typically brown loams overlying clay loams and mottled clays. The South Creek Soil Landscape is associated with drainage depressions within Blacktown Soil Landscapes and typically consists of loams, clay loams and underlying clay.

2.4.4 Acid Sulphate Soils

Acid Sulphate Soil is the common name given to sediment and soil containing iron sulphides (principally containing iron pyrite or iron disulfide). The exposure of pyrite in these soils to oxygen by drainage or excavation leads to the generation of sulphuric acid. Acidic leachate can dissolve clay and release toxic concentrations of aluminium, iron or other metals into water bodies. Drainage waters from areas of acid sulphate soils will affect water quality and can lead to death or disease of aquatic organisms.

A search of the NSW Natural Resources Atlas does not identify Acid Sulphate Soils to be present within the Site Boundaries or land surrounding the Site.

2.3.5 Soil Salinity and Aggressivity

The New South Wales Natural Resources Atlas indicated no evidence of salinity hazards or dryland salinity indicators within the Site boundaries or land surrounding the Site. The Site is located in an area described as 'moderate salinity potential' in the DIPNR Salinity Potential in Western Sydney 2002 Map.

Overall, the likelihood of aggressive corrosion is mild and the area is not likely to be impacted by salinity.

2.3.6 Site Meteorology

The Department of Meteorology NSW, gives the average annual rainfall for the Marsden Park area at 921.5mm, with an annual daytime temperature range of 17.4° - 29.9° C, and an annual average temperature of 24°C.

2.4 Development Controls

2.4.1 Blacktown City Council Section 149 Certificate

A Planning Certificate was obtained from Blacktown Council under Section 149 of the Environmental Planning and Assessment Act, 1979 for Lot 1 DP88530 and Lots 5, 6, 7, 8 and 9 DP27536, Townson Road, Marsden Park, NSW, stating:

The Site is currently zoned as a combination of 2(a) Residential A, R2 – Low Density Residential, 5(a) Special Use – Drainage and 6(a) Open Space – Public recreation;

The land does not include or comprise critical habitat and is not located in a Conservation Area;

No matters apply to this property under the Contaminated Land Management Act, 1997;

The land is not affected by the operation Sections 38 or 39 of the Coastal Protection Act, 1979;

The land has not been proclaimed to be within a mine subsidence district; and,

Areas of the site have been identified on the Blacktown flood risk precinct map as either Medium Flood Risk or High Flood Risk.

Refer to **Appendix C** – Section 149 Planning Certificate.

2.4.2 WorkCover Dangerous Goods License

A Workcover NSW search regarding the sites identified as Lot 1 DP88530 and Lots 5, 6, 7, 8 and 9 DP27536, Townson Road, Marsden Park, NSW, within their Stored Chemical Information Database (SCID), indicated that no Dangerous Goods Licenses have been held for the premises.

Refer to **Appendix D** – Dangerous Goods Search,

2.4.3 Contaminated Land Record Search

A search was conducted of all records pertaining to section 58 of the Contaminated Land Management Act 1997 and revealed that the Site at Townson Road, Marsden Park, is not encumbered by any notices from the NSW OEH with regard to contaminated land. No properties in the vicinity of the Site were encumbered by any notices.

2.5 Site History

2.5.1 Aerial Photograph Review

Aerial photographs for Lot 1 DP88530, Lots 5, 6, 7, 8 and 9 DP27536 and Part Lots 44, 45, 46 and 47 DP1175138, Townson Road, Marsden Park from 1947 to 2005, available from the NSW Lands Department, were reviewed by DLA with relevant observations being summarised below.

Aerial Photograph	Description
Jan 1947	The majority of the Site is covered in natural vegetation. Townson Road exists as a dirt track running off Richmond Road. Some of the area of what currently consists of lots 5-9 has been cleared and is possibly being used for grazing purposes attached to the neighbouring property to east.
Oct 1955	No significant visible change since 1947.
Aug 1965	The CSR brickmaking facility to the north-east of the Site has been constructed, containing some large buildings and an open cut pit. Areas east of Bells Creek have been cleared adjacent to Richmond Road.
Jul 1975	A dam has been installed within the clearing in the north-east corner of the Site. A circular dirt racing/motorcycle track has been created in the southern half of the Site, east of Bells Creek. The CSR facility to the north east has expanded. The neighbouring property to the south has been cleared.
Nov 1982	A building/residence has been erected north of the dam on what is currently Lot 9 in the north east corner of the Site. The circular dirt racing/motorcycle track is still present. Most of the land between Richmond Road and Bells Creek has now been cleared, with four (4) rural residence/businesses present and three (3) small dams.
Aug 1986	No significant visible change since 1982. Natural vegetation across much of the Site appears thicker.
Aug 1991	Little observable change since 1986. There has been an increase in the number of buildings present on properties along Richmond Road.
Oct 1994	No significant visible change since 1991.
Sept 1998	The paintball facility that currently operates over the south west corner of the Site has been established, with two (2) playing fields cleared in the centre of the circular dirt racing/motorcycle track. Additional sheds have been constructed around the

	primary residence on Lot 9 in the north east corner of the Site. Additional area has been cleared at the rear of properties along Richmond Road approaching Bells Creek, with some observable unidentified stockpiles present.
March 2002	Little observable change since 1998 with the exception of a number of sheds/small buildings now present at the northern end of the northernmost paintball field in the centre of the circular dirt racing/motorcycle track. The circular track no longer appears to be in use and is becoming overgrown. A small dam has been constructed on Lot 8.
Dec 2005	Little observable change since 2002. Vegetation is thinner across Lots 5-9 in the northern half of the Site. A small shed has been constructed in the centre of Lot 8 on Townson Road. 849 and 851 Richmond Road have cleared additional areas closer to Bells Creek.

2.5.2 Historical Title Search – Lot 60 DP1181670 or DP88530 and Lots 5, 6, 7, 8 and 9 DP27536, Townson Road, Marsden Park

Lands Department records indicate that the properties have been in private ownership from 1924 until present.

Date	Site Owner	Land Use/Occupation

Refer to **Appendix B** – Historical Title Search

2.5.3 Site History Summary

The Site history indicates that the investigation area has experienced little modification and has remained predominantly covered by natural vegetation up until the present time. Some contamination, related to past on site motor vehicle racing as well as imported obstacles utilised as part of the paintball facility in the south western corner of the investigation area, eg. drums, old cars, metallic debris, etc. may be present. Potential for contamination at the Site from on-site activities is considered to be low.

3.0 SITE INVESTIGATION PLAN

3.1 Field Investigation Procedure

The field investigation with supplementary soil sampling at the Townson Road Site was undertaken on the 7th August 2013 and comprised of the following:

- *Inspect Site and conduct a review of Site history and aerial photographs to identify appropriate sampling locations prior to the commencement of work;*
- *A judgemental sampling strategy to target areas of potential contamination;*
- *Conducting sampling in accordance with the NSW EPA Sampling Design Guidelines and National Environmental Protection (Assessment of Site Contamination) Measure 2013 (No.1); and*
- *Collection of sixteen (16) soil samples across the Site.*

Refer to **Figure 3** – Site Layout with Sample Locations

3.1.1 Soil Collection

Samples were obtained by using a decontaminated trowel from surface soils. The soil was placed into a non-preserved glass container with a Teflon lined threaded cap to be transported to the laboratory.

Soil samples for chemical analyses were collected in accordance with the NSW EPA Samples Guidelines 1994, NEPM 2013 and AS4482.1-2005.

All samples were collected by DLA Environmental who are specifically trained in hazardous waste field investigation techniques and health and safety procedures. All techniques used are specified in DLA's Environmental Field Manual for Contaminated Sites, which are based on methods specified by the United States Environment Protection Agency (US EPA) and The National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1).

3.1.2 Analytical Strategy

Samples were analysed for a range of contaminant indicators that may be associated with past and present land uses. Soil samples were analysed by Envirolab Services Pty Ltd of Chatswood for the following parameters:

Inorganic

- Heavy metals: arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), and zinc (Zn), in all sixteen (16) samples analysed; and
- Asbestos

Organic

- Total Recoverable Hydrocarbons (TRH), in all sixteen (16) samples analysed;
- Monocyclic aromatic hydrocarbons (BTEX), in all sixteen (16) samples analysed;
- Volatile TPH (vTPH), in all sixteen (16) samples analysed; and,
- Polycyclic Aromatic Hydrocarbons (PAH), in all sixteen (16) samples analysed.

No Photo Ionisation Detection (PID) assessments were undertaken as TRH analyses were performed on all samples collected. All samples were analysed for all potential contaminants to allow confident assessment of all representative areas of the Site.

Results of contaminant concentrations were assessed with reference to the relevant Health Investigation Levels (HIL's), prior to reporting and making recommendations.

Refer to **Appendix A** – NATA Certified Analytical Results.

3.2 Soil Criteria

3.2.1 Rationale for the Selection of Assessment Criteria

The criteria selected have been chosen in accordance with current Australian and NSW EPA guidelines. Australian Guidelines have been used in preference to international guidelines

where available. These criteria are the most current and widely accepted guidelines in use at present in Australia, and have generally been developed using a risk-based approach. Therefore, the general selected guidelines provide a satisfactory framework for the site assessment.

3.2.2 Soil Criteria

The site assessment criteria for assessing the Site were derived from the following publications:

- *Schedule B1 Guideline on the Investigation Levels for Soil and Groundwater from the National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013 (No.1) Table 1A(1) Column A – Residential with Garden / Accessible soil; and,*
- *NSW EPA Guidelines for the NSW Site Auditor Scheme, second edition 2006.*

Refer to **Tables 3a and 3b** - Adopted Site Criteria.

Table 3a – Site Criteria – Residential A: Garden / Accessible Soils

Analytes	Thresholds (mg/kg dry wt)
Heavy Metals	
Arsenic	100
Cadmium	20
Chromium (VI)	100
Copper	6,000
Lead	300
Mercury	40
Nickel	400
Zinc	7,400
Polycyclic Aromatic Hydrocarbons (PAHs)	
BaP TEQ	3
Total PAHs	300
Asbestos	
Surface	No asbestos
Sub-surface	0.01% (w/w)

Table 3b – Site TPH Vapour Intrusion Criteria – Residential A: Garden / Accessible Soils

Analytes	TPH Criteria for Residential Properties in sandy soils			
	0m to <1m	1m to <2m	2m to <4m	4m +
Toluene	160	220	310	540
Ethylbenzene	55	NL	NL	NL
Xylene (total)	40	60	95	170
Naphthalene	3	NL	NL	NL
Benzene	0.5	0.5	0.5	0.5
F1 – C_6-C_{10}	45	70	110	200
F2 – C_{10}-C_{16}	110	240	440	NL
#F3 – C_{16}-C_{34}	--	--	--	--
#F4 – C_{34}-C_{40}	--	--	--	--

No vapour criteria has been provided due to the non-volatile nature of the hydrocarbons and are "therefore not of concern for vapour intrusion"

(Scheduel B1, Section 2.4.6 Petrolium hydrocarbon compounds and fraction, NEMP 2013)

NL – Not Limiting

3.2.3 Limitations of the Assessment Criteria

All criteria have limitations. Not all chemical analytes are covered by each set of guidelines, requiring some criteria to be sourced from elsewhere. Only criteria relevant to Australia have been used in the interpretation of analytical data on the Site.

4.0 RESULTS

4.1 Field observations

Sixteen (16) soil samples were taken from sixteen (16) separate locations across the Site. The surface material across the Site was predominantly dark brown loam topsoil, which was underlain by light brown to yellow clay subsoil. No visually obvious fill was observed on the Site. Small landscaped earth mounds constructed as part of the paintball fields and dam batters in the north east corner of the Site appear to have been created with material on-site. A small stockpile consisting primarily of sheet metal debris and general household rubbish was present in the centre of Lot 9.

4.1.1 Asbestos

A small number of asbestos sheeting fragments were observed on the surface on the northern batter of the dam on the property at 68 Townson Road (Lot 9 DP27536). Laboratory analysis confirmed the presence of Chrysotile asbestos within the material.

4.1.2 Dangerous Goods

Dangerous Goods in any quantity must be stored safely and in compliance with the requirements of the Dangerous Goods Act 1975 and Its Regulations. The assessment confirmed the Work cover NSW search indicating that no Dangerous Goods are present on the Site.

4.1.3 Heritage / Archaeological Items

No Heritage or archaeological significance was noted either from the historical review or Site inspection.

4.1.4 Off-Site Observations

No current activities were apparent in the immediate surroundings of the Site which may potentially cause contamination.

4.2 Laboratory Results

All soils are analysed against the site criteria: NEPM 2013, Table 1A(1) Column A *Residential with Garden / Accessible Soil.* The sampling regime involved the collection of representative surface samples and subsurface samples where possible. A total of sixteen (16) soil samples were submitted to EnviroLab Pty Ltd and Australia Safer Environment and Technologies Pty Ltd for laboratory analysis. A summary of the laboratory results are outlined below.

Refer to **Appendix A** – NATA Certified Analytical Data.

4.2.1 Soil Analysis

Volatile Total Recoverable Hydrocabons (vTRH), BTEX and Naphthalene:

All sixteen (16) samples were analysed for Volatile Total Recoverable Hydrocarbons (vTRH), Benzene, Toluene, Ethylbenzene, Xylene (BTEX) and Naphthalene. There were no concentrations of vTRH, BTEX or Naphthalene recorded above the laboratory Limit of Reporting (LOR) and hence none above the assessment criteria.

Total Recoverable Hydrocarbons (TRH):

All sixteen (16) samples were analysed for TRH compounds and compared against the adopted Vapour Intrusion Criteria for sand in the NEPM (1999) Amended 2013 guidelines. Seven (7) samples detected concentrations of TRH compounds above the laboratory detection limit, however none were within the F2 fraction range, and is therefore not of concern for vapour intrusion.

Sample S12 recorded a TRH>C_{16}-C_{34} concentrations of 400mg/kg, exceeding the Ecological Screening Level for coarse soil texture of 300mg/kg for Urban residential and public open space.

Polycyclic Aromatic Hydrocarbons (PAH)

All sixteen (16) samples were analysed for Polycyclic Aromatic Hydrocarbons (PAHs). There was no concentrations of PAH recorded above the LOR and hence none above the HIL.

Heavy Metals

All sixteen (16) soil samples were submitted for analysis of all eight (8) heavy metals as recommended by the NSW OEH. No sample concentration of any tested metal exceeded the HILs of the NEPM 2013, Table 1A(1) Column A – *Residential with Garden / Accessible Soil*.

Table 4a – Heavy Metals 95% UCL Data (mg/kg)

Parameter	***Acid Extractable Metals – All DLA Assessment Data***							
	As	**Cd**	**Cr**	**Cu**	**Pb**	**Hg**	**Ni**	**Zn**
Average (n= 16)	5.3	0.4	19.2	14	33	0.1	4.4	26.1
Standard Deviation	1.6	0.2	4.8	18.5	65.9	0.1	1.8	25
Minimum (mg/Kg)	nd	nd	11	3	12	nd	2	6
Maximum (mg/Kg)	7	0.9	27	80	280	0.2	8	100
Number HIL Exceedances	0	0	0	0	0	0	0	0
95% UCL	6.1	0.5	21.7	22.1	62	0.1	5.2	37.1
Criteria (mg/Kg)	**100**	**20**	**100**	**6,000**	**300**	**40**	**400**	**7,400**

nd = non detect, N/A = Not Applicable (insufficient data to generate a statistical value)

Asbestos

A small number of asbestos sheeting fragments were observed on the surface on the northern batter of the dam on the property at 68 Townson Road (Lot 9 DP27536). Laboratory analysis confirmed the presence of Chrysotile asbestos within the material.

Two (2) soil samples, one from the area north of the northern paintball field and the other from the southern batter of the dam on 68 Townson Road, were taken and submitted for analysis of asbestos containing material and asbestos fibres. No asbestos fibres or asbestos micro-fragments were detected in either of the soil samples analysed.

4.3 QA/QC Comments

Laboratory QA/QC included calculation of %RPD, matrix spike recovery and blank determinations. All %RPD, matrix spike recovery and blank determinations were within acceptable limits. The Field Quality Plan was followed throughout sampling and the RPD of duplicate samples were within the identified criteria. Therefore, it is considered that sampling techniques, transportation and the analytical data generated is of an acceptable degree of

accuracy, representativeness, comparability, completeness and precision for the purpose of assessing the soil quality.

Refer to **Appendix B** – Quality Assurance and Quality Controls

5.0 DISCUSSION AND CONCLUSION

This Stage 1 Preliminary Environmental Site Assessment conducted a historical investigation of the potential environmental impacts and sixteen (16) supplemented soil samples on the Site identified as Part Lot 1 DP88530, Lots 5, 6, 7, 8 and 9 DP27536 and Part Lots 44, 45, 46 and 47 DP1175138, Townson Road, Marsden Park.

The WorkCover dangerous goods search and other aspects of the desktop study found that the Site is not encumbered by any contaminated land notices and does not have a registered history of storing any dangerous goods on-site that have the potential to contaminate and detrimentally affect the Site.

A search of the New South Wales Natural Resources Atlas indicated no evidence of salinity hazards or dryland salinity indicators within the Site boundaries or land surrounding the Site. The Site is located in an area described as 'moderate salinity potential' in the DIPNR Salinity Potential in Western Sydney 2002 Map. Therefore, soil salinity and aggressivity is not a concern for the intended land use of the Site and salinity and aggressivity analysis of soils is not believed to be necessary.

A review of the historical aerial photos indicates that with the exception of a few small clearings, the majority of the investigation site has remained covered with natural vegetation up until this point. A circular dirt racing/motorcycle track was in use from the 1970s through til the 1990s, with the south west corner of the Site utilised as part of a paintball facility since that time. A small residence on Lot 9 in the north east corner of the Site has been present since the 1980s. The premises are currently utilised an office for a refrigerated transportation business

Concentrations of vTRH, BTEX and PAH were not detected above the LOR in any of the samples, and therefore comply with the adopted site acceptance criteria. All eight (8) heavy metals analysed indicate no exceedances of the criteria were recorded and complied with relevant NEPM Guidelines.

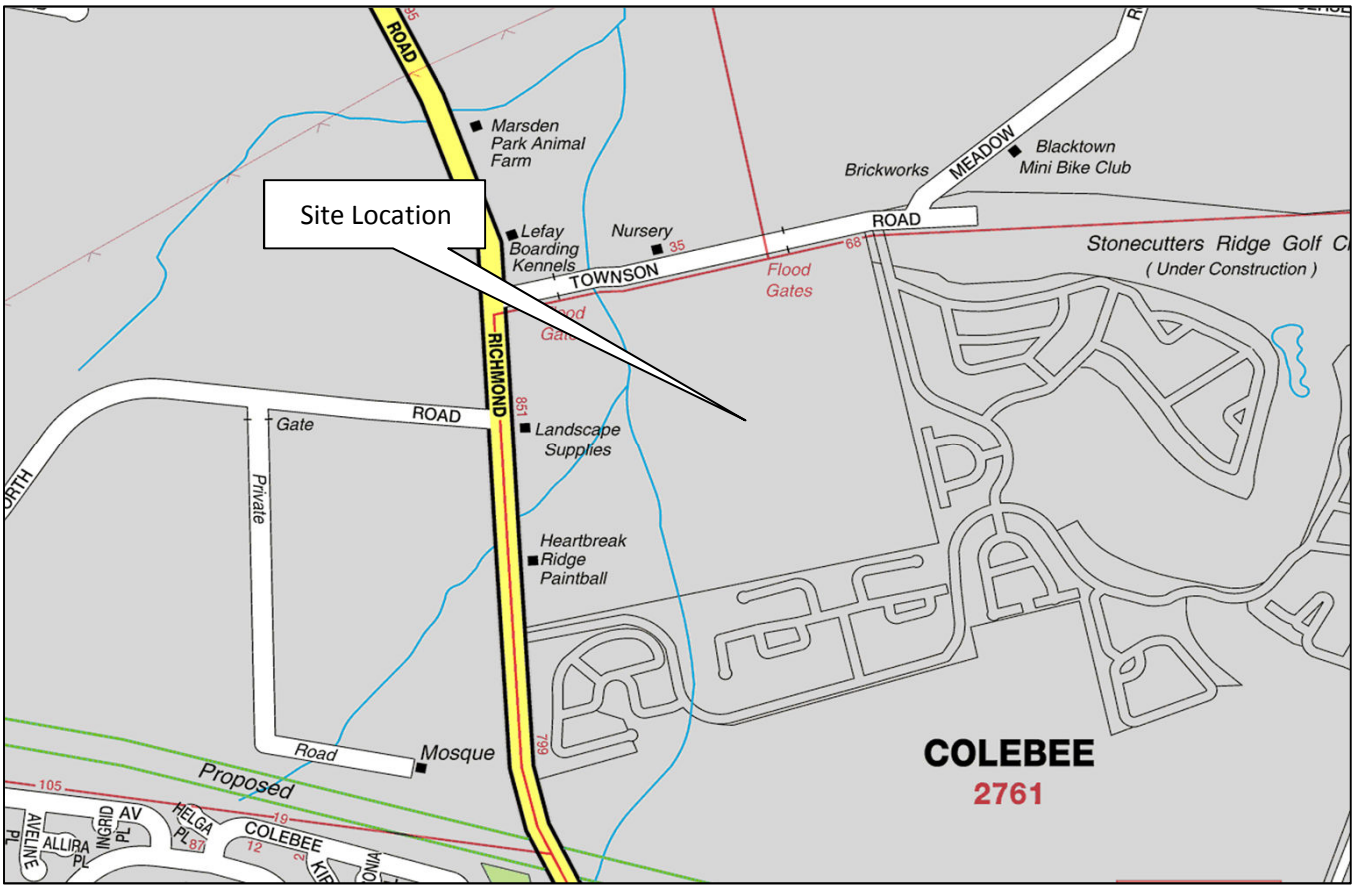
The recorded concentration of 400mg/kg for TRH>C_{16}-C_{34} (F3) at S12 exceeds the Ecological Screening Level for coarse soil texture of 300mg/kg for Urban residential and public open space. Chemicals in the F3 fraction range are non-volatile and therefore not of concern for vapour intrusion and are below the criteria for human health exposure. As S12 is located outside the riparian zone, it is not considered a significant risk to future plant growth in the area following development.

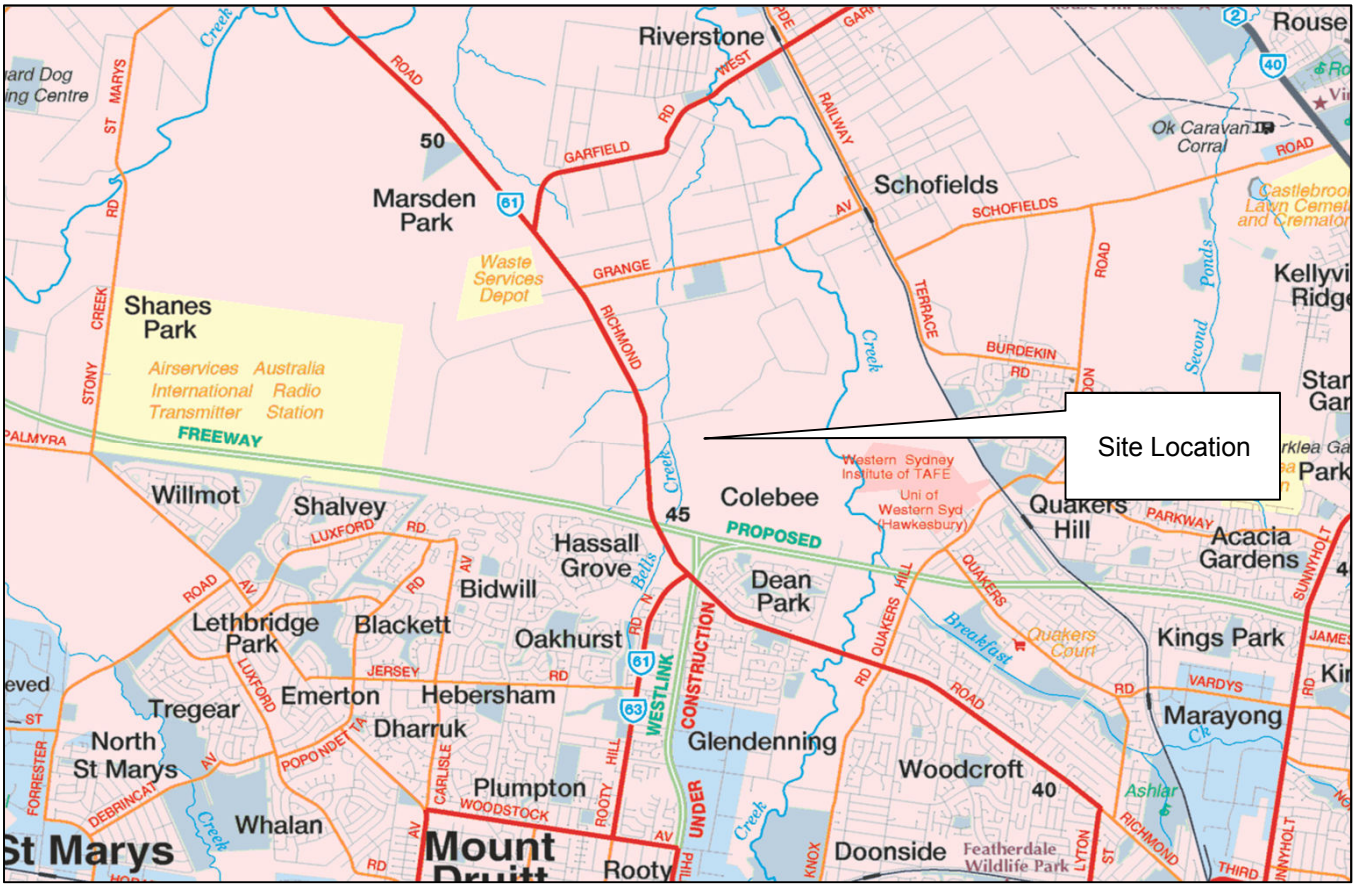
Asbestos containing fragments observed on the surface of the northern batter of the dam on the property at 68 Townson Road and will require remediation. Following removal, a Clearance Certificate should be provided in accordance with the *How to Safely Remove Asbestos* Code of Practice (Safe Work Australia, 2011).

The conclusion of this Stage 1 Environmental Site Assessment Report is that there is a low risk of contamination and **the Site can be made suitable for its intended land use** consistent with the definition of Column A – *Residential with Garden / Accessible Soil* land use provided by the National Environment Protection Council (NEPC) in Table 1A(1) of the NEPM 2013 Guidelines **following the issuing of an Asbestos Clearance Certificate.** If the land use is changed in the future the Site Assessment should be reviewed to ensure compliance with suitable soil investigation levels for appropriate end land use zoning.

Figure 1

Site Location

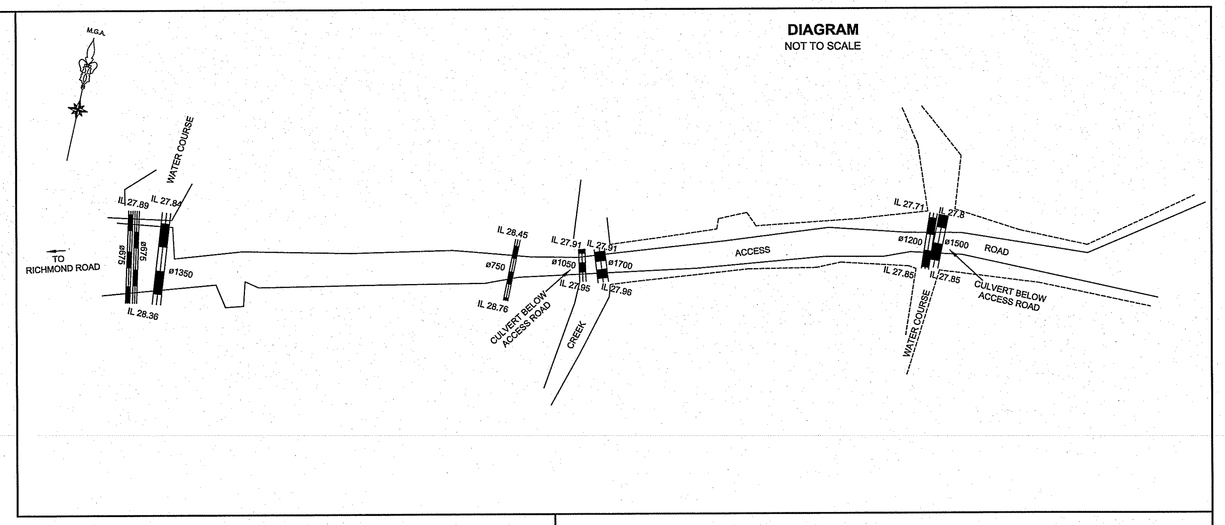


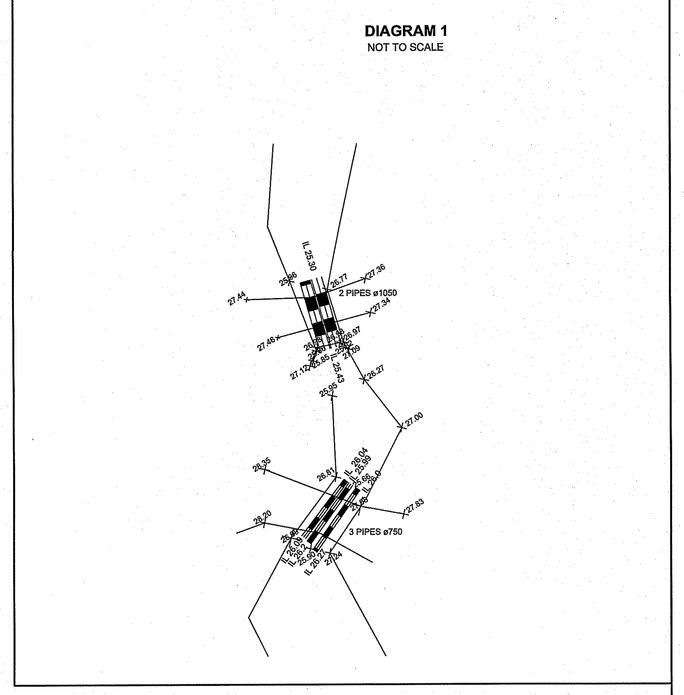


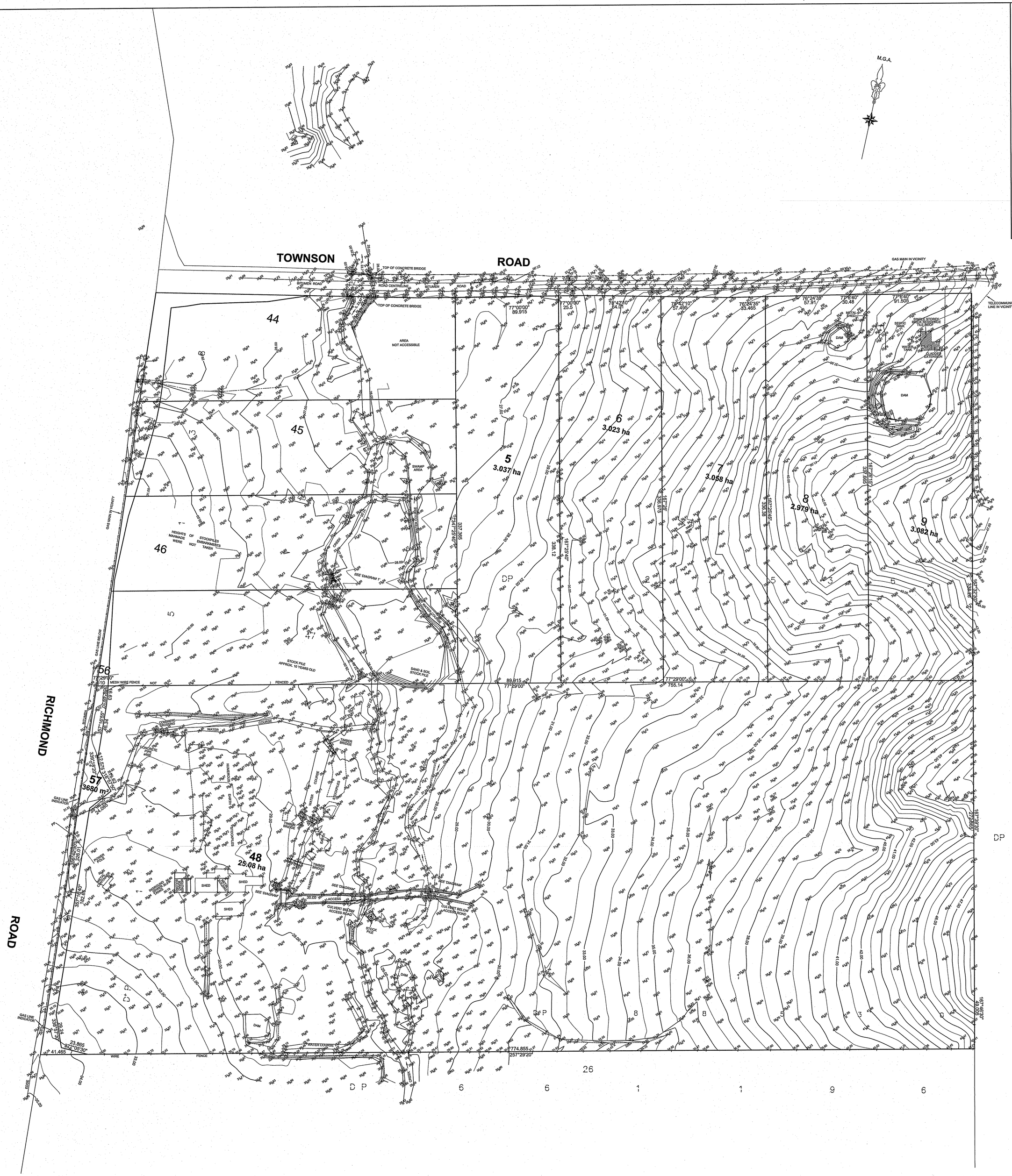
DLA environmental Unit 2b/30 Leighton Place Hornsby, NSW 2077	**DESIGNED:** DLA	SITE LOCATION	
	COMPILED: JC	**CLIENT:** Mecone	**DRAWING:** 11/09/2013
	PROJ. No. DL3164	**LOCATION:** Townson Road Colebee	**FIGURE:** 1

Figure 2

Detailed Site Survey







NOTE:

THIS PLAN IS PREPARED FOR DETAIL AND LEVEL PURPOSES ONLY AND AS SUCH THE BOUNDARIES OF THE LAND HAVE NOT BEEN SURVEYED OR MARKED.

ANY STRUCTURES RELATED TO PHYSICAL FEATURES (BUILDINGS, TREES, ETC.) MUST BE CONFIRMED PRIOR TO FINAL DESIGN

ALL SERVICES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

THIS DETAIL SURVEY IS NOT A 'SURVEY' AS DEFINED BY THE SURVEYORS ACT 1929. IF ANY CONSTRUCTION IS PLANNED IT WOULD BE ADVISABLE TO CARRY OUT FURTHER SURVEY WORK TO DETERMINE THE BOUNDARY DIMENSIONS.

ORIGIN OF LEVELS IS CORSnet

DISCLAIMER OF LIABILITIES TO ANY THIRD PARTIES : THIS PLAN IS MADE SOLELY FOR THE USE AND BENEFIT OF THE CLIENT NAMED ABOVE AND NO LIABILITY OR RESPONSIBILITY WHATSOEVER IS ACCEPTED TO ANY THIRD PARTY WHO MAY RELY ON THIS PLAN WHOLLY OR IN PART. ANY THIRD PARTIES ACTING OR RELYING OF THIS PLAN WHETHER WHOLLY OR IN PART ARE IN BREACH OF OUR COPYRIGHT AND DO SO AT THEIR OWN RISK.

NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR NEAR THE SITE

DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

www.dialbeforeyoudig.com.au
DIAL1100 BEFORE YOU DIG

LEGEND:

———————	OVERHEAD WIRES
———————	GAS LINE
PP	- POWER POLE
TP	- TELSTRA PIT

1) 18.07.2012 ADDITIONAL LEVELS IN TOWNSON ROAD
2) 8.10.2012 ADDITIONAL LEVELS LOT 48 IN DP 1175138
3) 1.11.2012 ADDITIONAL LEVELS

chadwickcheng
consulting surveyors
suite 317 / 5 celebration drive norwest business park nsw 2153
po box 7979 baulkham hills business centre nsw 2153
dx 8951 norwest
p: 88832622 f: 88832633 e: admin@cca.net.au

PLAN SHOWING SELECTED DETAILS & LEVELS OVER LOT 5 IN DP 27536 & LOT 48 IN DP 1175138 AT RICHMOND ROAD, MARSDEN PARK

DATUM:	AHD	RATIO:	1 : 1250 (A0)
DATE:	11.07.2012	PRINCIPAL:	GDS P/L

SHEET 1 OF 1 SHEETS

REFERENCE 31326 / D3

Figure 3

Site Layout

Townson Road, Colebee, NSW

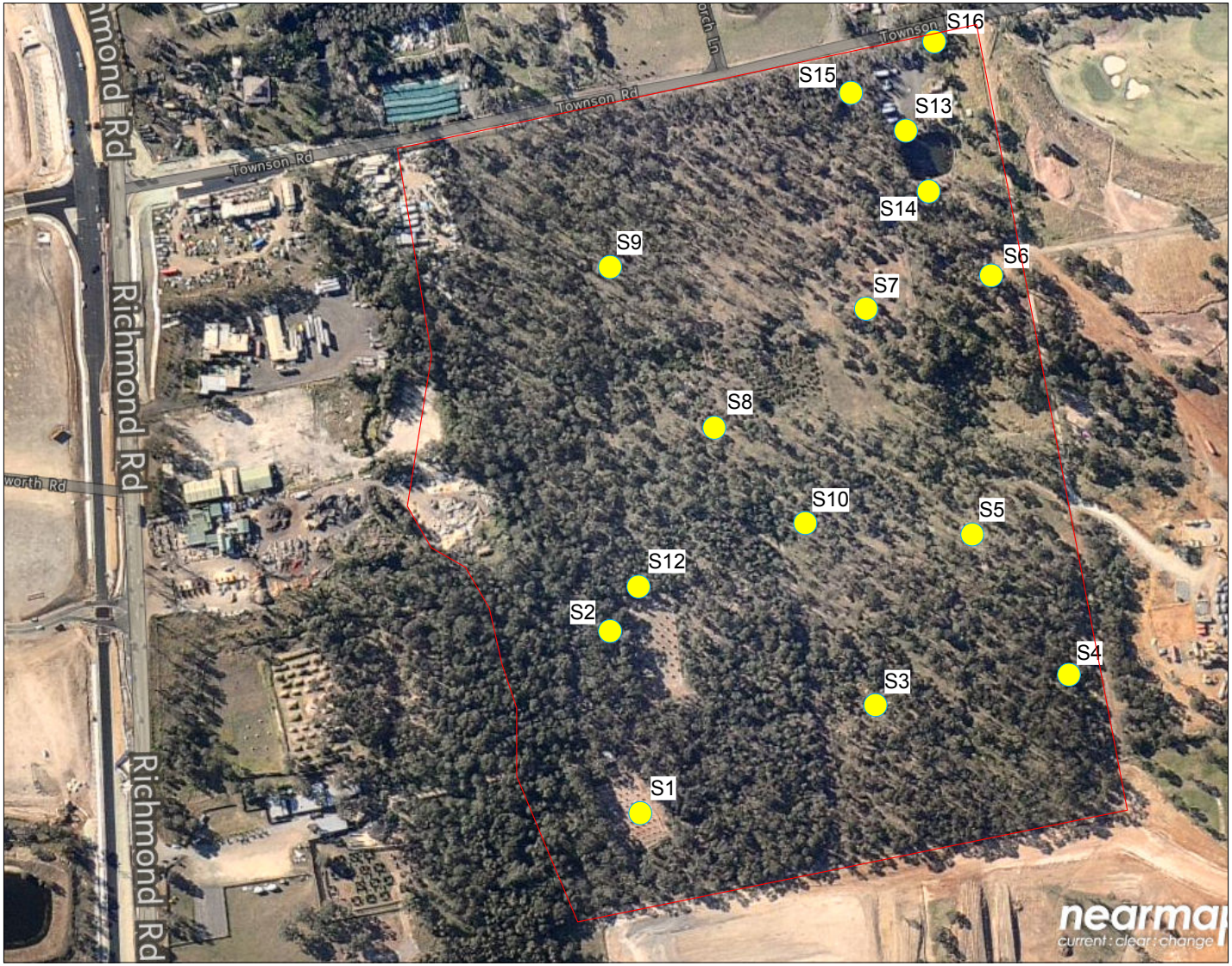


Figure modified from www.nearmaps.com.au 2.09.2013 air photo

Legend

- Site Boundary
- Sampling Locations

Scale

0 100 200 300 400

(meters)

N

DLA environmental

Unit 2b/30 Leighton Place
Hornsby, NSW 2077

Newcastle Office
Phone (02) 4949 3800
Fax (02) 4949 3811

Sydney Office
Phone (02) 9476 1765
Fax (02) 9476 1557

Title: Sampling Locations			
Client: Mecone	Job No: DL3164	Figure No: 2	Date: 18/9/2013
	Scale: As Shown	Sheet: 1 of 1	Revision: R00

Appendix A

NATA Certified Analytical Results

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 97379

Client:
David Lane Associates
2B, 30 Leighton Pl
Hornsby
NSW 2077

Attention: Josh Crawford

Sample log in details:

Your Reference:	**DL3164, Townson**		
No. of samples:	17 Soils		
Date samples received / completed instructions received	13/09/2013	/	13/09/2013

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:	17/09/13	/	17/09/13
Date of Preliminary Report:	Not issued		

NATA accreditation number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025. **Tests not covered by NATA are denoted with *.**

Results Approved By:

Jacinta Hurst
Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	<25	<25	<25	<25	<25
TRHC$_6$ - C$_{10}$	mg/kg	<25	<25	<25	<25	<25
vTPHC$_6$ - C$_{10}$ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	125	138	134	126	138

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	<25	<25	<25	<25	<25
TRHC$_6$ - C$_{10}$	mg/kg	<25	<25	<25	<25	<25
vTPHC$_6$ - C$_{10}$ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	126	138	132	137	140

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	<25	<25	<25	<25	<25
TRHC$_6$ - C$_{10}$	mg/kg	<25	<25	<25	<25	<25
vTPHC$_6$ - C$_{10}$ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	140	134	114	140	137

vTRH(C6-C10)/BTEXN in Soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	<25	<25
TRHC$_6$ - C$_{10}$	mg/kg	<25	<25
vTPHC$_6$ - C$_{10}$ less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
naphthalene	mg/kg	<1	<1
Surrogate aaa-Trifluorotoluene	%	132	132

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	110	140	<100	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	120	230	160	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	150	200	230	120	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	230	140	<100
Surrogate o-Terphenyl	%	100	102	97	99	94

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	<100	<100	110
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100	150	<100	200
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100	130	100	210
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100	<100	<100	180
Surrogate o-Terphenyl	%	94	92	98	95	101

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50	<50	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100	310	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	130	<100	200	<100	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	130	<100	400	<100	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	130	<100	130	<100	<100
Surrogate o-Terphenyl	%	97	92	99	93	90

svTRH (C10-C40) in Soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	<50	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100	<100
Surrogate o-Terphenyl	%	86	88

PAHs in Soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ NEPM B1	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total +ve PAH's	mg/kg	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	99	91	96	97	97

PAHs in Soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ NEPM B1	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total +ve PAH's	mg/kg	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	97	97	101	101	96

PAHs in Soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ NEPM B1	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total +ve PAH's	mg/kg	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	93	102	97	99	101

PAHs in Soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Benzo(a)pyrene TEQ NEPM B1	mg/kg	<0.5	<0.5
Total +ve PAH's	mg/kg	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	95	98

Organochlorine Pesticides in soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	95	97	101	99

Organochlorine Pesticides in soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	97	97	94	95

Organochlorine Pesticides in soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	98	99	97	100

Organochlorine Pesticides in soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013
HCB	mg/kg	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Surrogate TCMX	%	97	97

Organophosphorus Pesticides						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	95	97	101	99

Organophosphorus Pesticides						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	97	97	94	95

Organophosphorus Pesticides						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	98	99	97	100

Organophosphorus Pesticides			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013
Diazinon	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Surrogate TCMX	%	97	97

PCBs in Soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	100	95	97	101	99

PCBs in Soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	94	97	97	94	95

PCBs in Soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	88	98	99	97	100

PCBs in Soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date extracted	-	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013
Arochlor 1016	mg/kg	<0.1	<0.1
Arochlor 1221	mg/kg	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	97	97

Acid Extractable metals in soil						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arsenic	mg/kg	5	7	5	6	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	0.6
Chromium	mg/kg	24	18	20	24	18
Copper	mg/kg	3	5	7	10	5
Lead	mg/kg	12	18	16	12	16
Mercury	mg/kg	0.2	0.2	0.2	0.2	0.1
Nickel	mg/kg	2	4	4	2	5
Zinc	mg/kg	6	16	14	13	12

Acid Extractable metals in soil						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arsenic	mg/kg	<4	6	7	6	7
Cadmium	mg/kg	<0.4	0.5	0.6	<0.4	<0.4
Chromium	mg/kg	11	17	25	20	14
Copper	mg/kg	80	6	5	5	15
Lead	mg/kg	18	15	18	17	15
Mercury	mg/kg	<0.1	<0.1	0.1	0.1	<0.1
Nickel	mg/kg	8	2	3	4	4
Zinc	mg/kg	73	8	25	13	20

Acid Extractable metals in soil						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Arsenic	mg/kg	8	7	4	<4	6
Cadmium	mg/kg	<0.4	0.5	0.5	<0.4	0.4
Chromium	mg/kg	12	27	20	11	15
Copper	mg/kg	14	10	5	18	18
Lead	mg/kg	16	18	280	14	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	4	4	5	7
Zinc	mg/kg	22	19	14	27	29

Acid Extractable metals in soil			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date digested	-	16/09/2013	16/09/2013
Date analysed	-	16/09/2013	16/09/2013
Arsenic	mg/kg	5	4
Cadmium	mg/kg	0.6	0.9
Chromium	mg/kg	23	21
Copper	mg/kg	10	22
Lead	mg/kg	20	26
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	6	7
Zinc	mg/kg	29	100

Moisture						
Our Reference:	UNITS	97379-1	97379-2	97379-3	97379-4	97379-5
Your Reference	----------	S1	S2	S3	S4	S5
Depth	----------	0.2	0.2	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Moisture	%	6.2	2.7	7.2	14	2.4

Moisture						
Our Reference:	UNITS	97379-6	97379-7	97379-8	97379-9	97379-10
Your Reference	----------	S6	S7	S8	S9	S10
Depth	----------	-	-	0.2	0.2	0.2
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Moisture	%	4.4	3.8	4.8	5.6	9.8

Moisture						
Our Reference:	UNITS	97379-11	97379-12	97379-13	97379-14	97379-15
Your Reference	----------	S10A	S11	S12	S13	S14
Depth	----------	0.2	0.2	-	-	-
Date Sampled		12/09/2013	12/09/2013	12/09/2013	12/09/2013	12/09/2013
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/09/2013	16/09/2013	16/09/2013	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013	17/09/2013	17/09/2013	17/09/2013
Moisture	%	12	4.8	3.2	6.2	3.4

Moisture			
Our Reference:	UNITS	97379-16	97379-17
Your Reference	----------	S15	S16
Depth	----------	-	-
Date Sampled		12/09/2013	12/09/2013
Type of sample		Soil	Soil
Date prepared	-	16/09/2013	16/09/2013
Date analysed	-	17/09/2013	17/09/2013
Moisture	%	6.3	9.3

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. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-012 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
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+/-5 deg C for a minimum of 12 hours.

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base || Duplicate || %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			17/09/2013	97379-1	17/09/2013 || 17/09/2013	LCS-2	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	25	Org-016	<25	97379-1	<25 || <25	LCS-2	91%
TRHC$_6$ - C$_{10}$	mg/kg	25	Org-016	<25	97379-1	<25 || <25	LCS-2	91%
Benzene	mg/kg	0.2	Org-016	<0.2	97379-1	<0.2 || <0.2	LCS-2	76%
Toluene	mg/kg	0.5	Org-016	<0.5	97379-1	<0.5 || <0.5	LCS-2	105%
Ethylbenzene	mg/kg	1	Org-016	<1	97379-1	<1 || <1	LCS-2	92%
m+p-xylene	mg/kg	2	Org-016	<2	97379-1	<2 || <2	LCS-2	92%
o-Xylene	mg/kg	1	Org-016	<1	97379-1	<1 || <1	LCS-2	91%
naphthalene	mg/kg	1	Org-014	<1	97379-1	<1 || <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	140	97379-1	125 || 131 || RPD: 5	LCS-2	123%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base || Duplicate || %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			17/09/2013	97379-1	17/09/2013 || 17/09/2013	LCS-2	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	50	Org-003	<50	97379-1	<50 || <50	LCS-2	132%
TRHC$_{15}$ - C$_{28}$	mg/kg	100	Org-003	<100	97379-1	110 || 110 || RPD: 0	LCS-2	122%
TRHC$_{29}$ - C$_{36}$	mg/kg	100	Org-003	<100	97379-1	<100 || <100	LCS-2	118%
TRH>C$_{10}$-C$_{16}$	mg/kg	50	Org-003	<50	97379-1	<50 || <50	LCS-2	132%
TRH>C$_{16}$-C$_{34}$	mg/kg	100	Org-003	<100	97379-1	150 || 140 || RPD: 7	LCS-2	122%
TRH>C$_{34}$-C$_{40}$	mg/kg	100	Org-003	<100	97379-1	<100 || <100	LCS-2	118%
Surrogate o-Terphenyl	%		Org-003	98	97379-1	100 || 100 || RPD: 0	LCS-2	106%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base || Duplicate || %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			17/09/2013	97379-1	17/09/2013 || 17/09/2013	LCS-2	17/09/2013
Naphthalene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	113%
Acenaphthylene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	112%
Phenanthrene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	98%
Anthracene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	95%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Pyrene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	120%
Benzo(a)anthracene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	LCS-2	94%
Benzo(b+k)fluoranthene	mg/kg	0.2	Org-012 subset	<0.2	97379-1	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	Org-012 subset	<0.05	97379-1	<0.05 || <0.05	LCS-2	99%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012 subset	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012 subset	95	97379-1	99 || 102 || RPD: 3	LCS-2	97%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
HCB	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	88%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	92%
Heptachlor	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	100%
delta-BHC	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	85%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	84%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	93%
Dieldrin	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	87%
Endrin	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	82%
pp-DDD	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	95%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	LCS-2	103%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Surrogate TCMX	%		Org-005	88	97379-1	100 || 99 || RPD: 1	LCS-2	91%

QUALITY CONTROL Organophosphorus Pesticides	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Diazinon	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos-methyl	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	LCS-2	86%
Fenitrothion	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	LCS-2	117%
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	Org-008	<0.1	97379-1	<0.1 || <0.1	LCS-2	94%
Surrogate TCMX	%		Org-008	88	97379-1	100 || 99 || RPD: 1	LCS-2	90%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Date analysed	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-2	16/09/2013
Arochlor 1016	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	LCS-2	90%
Arochlor 1260	mg/kg	0.1	Org-006	<0.1	97379-1	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%		Org-006	88	97379-1	100 || 99 || RPD: 1	LCS-2	90%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Date digested	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-1	16/09/2013
Date analysed	-			16/09/2013	97379-1	16/09/2013 || 16/09/2013	LCS-1	16/09/2013
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	97379-1	5 || 5 || RPD: 0	LCS-1	94%
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	97379-1	<0.4 || <0.4	LCS-1	95%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	97379-1	24 || 23 || RPD: 4	LCS-1	99%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	97379-1	3 || 4 || RPD: 29	LCS-1	96%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	97379-1	12 || 11 || RPD: 9	LCS-1	95%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	97379-1	0.2 || 0.2 || RPD: 0	LCS-1	80%

QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base ll Duplicate ll %RPD	Spike Sm#	Spike % Recovery
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	97379-1	2 || 2 || RPD: 0	LCS-1	99%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	97379-1	6 || 7 || RPD: 15	LCS-1	98%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Date prepared	-			[NT]
Date analysed	-			[NT]
Moisture	%	0.1	Inorg-008	[NT]

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	17/09/2013 || 17/09/2013	97379-2	17/09/2013
TRHC$_6$ - C$_9$	mg/kg	97379-11	<25 || <25	97379-2	96%
TRHC$_6$ - C$_{10}$	mg/kg	97379-11	<25 || <25	97379-2	96%
Benzene	mg/kg	97379-11	<0.2 || <0.2	97379-2	80%
Toluene	mg/kg	97379-11	<0.5 || <0.5	97379-2	107%
Ethylbenzene	mg/kg	97379-11	<1 || <1	97379-2	98%
m+p-xylene	mg/kg	97379-11	<2 || <2	97379-2	98%
o-Xylene	mg/kg	97379-11	<1 || <1	97379-2	96%
naphthalene	mg/kg	97379-11	<1 || <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%	97379-11	140 || 134 || RPD: 4	97379-2	126%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	17/09/2013 || 17/09/2013	97379-2	17/09/2013
TRHC$_{10}$ - C$_{14}$	mg/kg	97379-11	<50 || <50	97379-2	#
TRHC$_{15}$ - C$_{28}$	mg/kg	97379-11	<100 || <100	97379-2	#
TRHC$_{29}$ - C$_{36}$	mg/kg	97379-11	130 || 200 || RPD: 42	97379-2	#
TRH>C$_{10}$-C$_{16}$	mg/kg	97379-11	<50 || <50	97379-2	#
TRH>C$_{16}$-C$_{34}$	mg/kg	97379-11	130 || 200 || RPD: 42	97379-2	#
TRH>C$_{34}$-C$_{40}$	mg/kg	97379-11	130 || 190 || RPD: 38	97379-2	#
Surrogate o-Terphenyl	%	97379-11	97 || 98 || RPD: 1	97379-2	124%

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	17/09/2013 || 17/09/2013	97379-2	17/09/2013
Naphthalene	mg/kg	97379-11	<0.1 || <0.1	97379-2	115%
Acenaphthylene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	97379-11	<0.1 || <0.1	97379-2	116%
Phenanthrene	mg/kg	97379-11	<0.1 || <0.1	97379-2	102%
Anthracene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	97379-11	<0.1 || <0.1	97379-2	98%
Pyrene	mg/kg	97379-11	<0.1 || <0.1	97379-2	123%
Benzo(a)anthracene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	97379-11	<0.1 || <0.1	97379-2	94%
Benzo(b+k)fluoranthene	mg/kg	97379-11	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	97379-11	<0.05 || <0.05	97379-2	96%
Indeno(1,2,3-c,d)pyrene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	97379-11	93 || 97 || RPD: 4	97379-2	97%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
HCB	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
alpha-BHC	mg/kg	97379-11	<0.1 || <0.1	97379-2	94%
gamma-BHC	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
beta-BHC	mg/kg	97379-11	<0.1 || <0.1	97379-2	96%
Heptachlor	mg/kg	97379-11	<0.1 || <0.1	97379-2	104%
delta-BHC	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Aldrin	mg/kg	97379-11	<0.1 || <0.1	97379-2	88%
Heptachlor Epoxide	mg/kg	97379-11	<0.1 || <0.1	97379-2	84%
gamma-Chlordane	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Endosulfan I	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
pp-DDE	mg/kg	97379-11	<0.1 || <0.1	97379-2	93%
Dieldrin	mg/kg	97379-11	<0.1 || <0.1	97379-2	87%
Endrin	mg/kg	97379-11	<0.1 || <0.1	97379-2	88%
pp-DDD	mg/kg	97379-11	<0.1 || <0.1	97379-2	95%
Endosulfan II	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
pp-DDT	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	97379-11	<0.1 || <0.1	97379-2	106%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Methoxychlor	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Surrogate TCMX	%	97379-11	88 || 99 || RPD: 12	97379-2	97%
QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Diazinon	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Dimethoate	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos-methyl	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Ronnel	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Chlorpyriphos	mg/kg	97379-11	<0.1 || <0.1	97379-2	90%
Fenitrothion	mg/kg	97379-11	<0.1 || <0.1	97379-2	110%
Bromophos-ethyl	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Ethion	mg/kg	97379-11	<0.1 || <0.1	97379-2	89%
Surrogate TCMX	%	97379-11	88 || 99 || RPD: 12	97379-2	95%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Arochlor 1016	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Arochlor 1221	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	97379-11	<0.1 || <0.1	97379-2	95%
Arochlor 1260	mg/kg	97379-11	<0.1 || <0.1	[NR]	[NR]
Surrogate TCLMX	%	97379-11	88 || 99 || RPD: 12	97379-2	95%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Date analysed	-	97379-11	16/09/2013 || 16/09/2013	97379-2	16/09/2013
Arsenic	mg/kg	97379-11	8 || 7 || RPD: 13	97379-2	80%
Cadmium	mg/kg	97379-11	<0.4 || <0.4	97379-2	76%
Chromium	mg/kg	97379-11	12 || 13 || RPD: 8	97379-2	86%
Copper	mg/kg	97379-11	14 || 16 || RPD: 13	97379-2	91%
Lead	mg/kg	97379-11	16 || 12 || RPD: 29	97379-2	82%
Mercury	mg/kg	97379-11	<0.1 || <0.1	97379-2	94%
Nickel	mg/kg	97379-11	4 || 3 || RPD: 29	97379-2	81%
Zinc	mg/kg	97379-11	22 || 14 || RPD: 44	97379-2	82%

Report Comments:

Total Recoverable Hydrocarbons in soil (NEPM):# Percent recovery is not possible to report due to interference from analytes (other than those being tested) in the sample/s.

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 batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.
Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.
Spikes for Physical and Aggregate Tests are not applicable.
For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET35147/ 38327 / 1 - 3
Your ref : DL3164 – Townson Rd
NATA Accreditation No: 14484

17 September 2013

DLA Environmental
2B/30 Leighton Street
Hornsby NSW 2077

Attn: Mr David Lane

Dear David

Asbestos Identification
This report presents the results of three samples, forwarded by DLA Environmental on 13 September 2013, for analysis for asbestos.

1.Introduction: Three samples forwarded were examined and analysed for the presence of asbestos.

2. Methods : The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method. **(Safer Environment Method 1.)**

3. Results :

Sample No. 1. ASETY35147 / 38327 / 1. S12.
Approx dimensions 8.4 cm x 7.4 cm x 7.3 cm
The sample consisted of a mixture of soil, stones and plant matter.
No asbestos detected.

Sample No. 2. ASETY35147 / 38327 / 2. S16.
Approx dimensions 8.6 cm x 8.5 cm x 7.7 cm
The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of brick.
No asbestos detected.

Sample No. 3. ASETY35147 / 38327 / 3. S15.
Approx dimensions 16.4 cm x 6.3 cm x 0.4 cm
The sample consisted of a fragment of a fibre cement material.
Chrysotile asbestos detected.

Analysed and reported by,

Laxman Dias. BSc
Analyst / Approved Identifier
Approved Signatory

NATA
WORLD RECOGNISED
ACCREDITATION

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

Appendix B

Quality Assurance and Quality Control

Appendix B1 – Field Quality Control

During the preliminary site assessment of contaminated sites the integrity of data collected is considered paramount. With the assessment of the Site, a number of measures were taken to ensure the quality of the data. These included:

Sample Containers

Soil samples collected during the investigation were placed immediately into laboratory prepared glass jars with Teflon lid inserts. Standard identification labels were adhered to each individual container and labelled according to depth, date, sampling team and media collected.

Decontamination

All equipment used in the sampling program which includes a hand auger, spades and mixing bowl was decontaminated prior to use and between samples to prevent cross contamination. Decontamination of equipment involved the following procedures:

Cleaning equipment in potable water to remove gross contamination;

Cleaning in a solution of Decon 90;

Rinsing in clean demineralised water then wiping with clean lint free cloths;

DLA also adopted a sampling gradient of lowest to highest potential contamination to minimise the impact of cross contamination. This gradient was determined from the historical review and the on-site inspection that was carried out prior to sampling.

Sample Tracking, Identification and Holding Times

All samples were forwarded to EnviroLab under recognised chain of custodies with clear identification outlining the date, location, sampler and sample ID. All samples were recorded by the laboratory as meeting their respective holding times. The sample tracking system is considered adequate for the purposes of sample collection.

Sample Transport

All samples were packed into an esky with ice from the time of collection alongside a trip blank and trip spike. These were transported under chain of custody from the site to EnviroLab Services Pty Ltd a NATA registered laboratory located in Chatswood and Sydney Environmental Soil Laboratory a NATA registered laboratory located in Thornleigh. During the project, the laboratories reported that all the samples arrived intact and were analysed within holding times for the respective analytes. Samples were kept below 4°C at all times, soil samples submitted for asbestos analysis are not required to be kept below 4°C.

Field Duplicate Samples

Field duplicate samples were prepared in the field through the following process:

> *A larger than normal quantity of soil is recovered from the sample location selected for duplication.*
>
> *The sample is placed in a decontaminated stainless bowl and mixed as thoroughly as practicable before being divided into equal parts.*
>
> *Two Portions of the sub-sample are immediately transferred, one for an intra-laboratory duplicate and another as a sample.*
>
> *Samples are placed into a labelled, laboratory supplied 250ml glass jar and sealed with an airtight, Teflon screw top lid. The fully filled jars are labelled as the sample and duplicate and immediately placed in a chilled esky.*

Duplicate samples were prepared on the basis of sample numbers recovered during the field work. The duplicate sample frequency was computed using the total number of samples analysed as part of this assessment. The duplicate sample frequencies are shown below:

Investigative Samples	16 samples	1 intra laboratory duplicates	16.7%

Comparisons were made of the laboratory test results for the duplicate samples with the original samples and the Relative Percentage Difference (RPD) calculated as difference/ Average in order to assess the accuracy of the sampling and laboratory test procedures.

The comparisons between the duplicates and original samples indicate acceptable RPDs when they comply with criteria which are commonly set at:

- less than 30% for inorganics and 50% for organics
- greater than five (5) times the laboratory limit of recording (LOR)
- greater than 5% of the relevant health investigation level (HIL) concentration

Table B3 - Calculated intra-laboratory RPDs for Metals

Duplicate	RPD							
	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn
S10	6	<0.4	15	17	17	<0.1	5	27
S10_A	6	<0.4	13	16	15	<0.1	4	25
RPD (%)	0	0	14	6	13	0	0	12
Acceptable Criteria (%)	**30**	**30**	**30**	**30**	**30**	**30**	**30**	**30**

Table B4 - Calculated intra-laboratory RPDs for B(a)P and PAH's

Duplicate	RPD	
	B(a)P	Total PAH's
S5	<0.1	nd
S5_A	<0.1	nd
RPD (%)	**0**	**0**
Acceptable Criteria (%)	**50**	**50**

Duplicates

There were no RPD exceedances recorded. The RPD is an indication of heterogeneity of material, due to the materials comprising of varying content. The concentration for the RPD is based on a pose no risk to human health. Overall the margin of error when applied to the validation data suggests limited risk to human health or the environment can be inferred.

B2 – Laboratory Analytical and Quality Plan

The integrity of analytical data provides the second step in the QA/QC process for total data compliance. The data validation techniques adopted by DLA are based upon techniques published by the US EPA and in line with methods and guidelines adopted by the NSW EPA and outlined in the NEPM, 2013.

Descriptions are provided of the specific mechanisms used in the assessment of accuracy, precision and useability of analytical data within the project.

Duplicates

Laboratory Duplicates are tested to ensure the results meet the requirements of QA/QC. The samples from Site showed a percent recovery for all analytes not exceeding the respective laboratory criteria.

Surrogates

To assess the performance of individual organic analysis the laboratory used surrogates, Recoveries were calculated for each surrogate providing an indication of analytical accuracy. Surrogate recoveries for soil samples were all within recommended control limits, indicating that there was an acceptable degree of accuracy in analysing for organic compounds.

Laboratory Detection Limits

Laboratory detection limits for soil and water analyses by EnviroLab are outlined in Table B5 below:

Table B5 – Method of Soil Analysis – EnviroLab

Analyte	Method	Level of Reporting Soil mg/kg
Polycyclic Aromatic Hydrocarbons	USEPA SW-846 Method 8270,	0.1 (Ind. Analyte)
Metals	USEPA 200.7 USEPA 7471A	Hg <0.10 As-Cd-Cr-Cu- <0.10 Ni-Pb-Zn <0.5
Pesticides	USEPA SW-846 Method 8081 USEPA SW-846 Method 8140 USEPA SW-846 Method 8080 USEPA SW-846 Method 8870	OCP 0.10 OPP 0.10
PCB	USEPA SW-846 Method 8080 USEPA SW-846 Method 8081	PCB 0.10
BTEX	USEPA SW-846 Method 8260	Benzene 1.0 Toluene 1.0 Ethylbenzene 1.0 Total Xylene 3.0
TPH	USEPA SW-846 Method 8260 USEPA SW-846 Method 8000	C6-C9 25 C10-C14 50 C15-C28 100 C29-C36 100

Appendix C

Section 149 Certificate

Blacktown City Council

PLANNING CERTIFICATE UNDER SECTION 149

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Certificate No.: **13-5939**
Date: **19 SEP 2013**
Page: **1 of 12**
Enquiries: **s149 Clerk**
Applicants Ref.: **647246 - D LA-MARSDEN PARK**

Applicant JENNERS TITLE SEARCHING CO
DX 779
SYDNEY

Property LOT 60 DP 1181670

RICHMOND ROAD,

Suburb MARSDEN PARK Parish of Gidley

NOTE: **The land the subject of this Certificate is known to be located in the suburb of Marsden Park. For all correspondence and property transactions this suburb name is to be used.**

PART A
PRESCRIBED INFORMATION PROVIDED PURSUANT TO SECTION 149(2) OF THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 (EP&A Act 1979)*

NOTE: The following information is provided pursuant to Section 149(2) of the EP&A Act 1979, as prescribed by Schedule 4 of the *Environmental Planning and Assessment Regulation 2000*, and is applicable as of the date of this certificate.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DEVELOPMENT CONTROL PLANS

1.1 Environmental Planning Instruments

The abovementioned land is affected by the following environmental planning instrument and proposed environmental planning instrument/s (where applicable) which have been the subject of community consultation or on public exhibition under the Act.

Blacktown Local Environmental Plan 1988 **(Refer to Attachment A)**

Blacktown Local Environmental Plan 1988 specifies the purposes for which development may be carried out or are prohibited.

Draft Blacktown Local Environmental Plan 2013 **(Refer to Attachment B)**

Blacktown City Council has a draft City-wide Local Environmental Plan, known as Draft Blacktown Local Environmental Plan (BLEP) 2013, which will eventually replace the existing BLEP 1988. Draft BLEP 2013 has been prepared in accordance with the NSW State Government's Standard Instrument (Local Environmental Plans) Order 2006. Under Draft BLEP 2013 it is proposed to zone the land:

RU4 - PRIMARY PRODUCTION SMALL LOTS

Draft BLEP 2013 specifies the purposes for which development may be carried out (either with or without the need for development consent) or which are prohibited in the zone proposed to apply to the land.

1.2 Development Control Plans

The land is affected by Blacktown Development Control Plan (DCP) 2006.

This DCP provides general guidance for the development of land within the City of Blacktown.

The land is also affected by the NSW Government's Blacktown City Council Growth Centre Precincts Development Control Plan 2010.

1.3 Relevant State Environmental Planning Policies (SEPPs), including draft policies, or Regional Environmental Plans deemed to be SEPPs

State Environmental Planning Policy No. 1 - Development Standards

The policy requires that variations to development standards must meet the objectives of local plans and controls. It makes development standards more flexible. It allows councils to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

State Environmental Planning Policy No. 4 - Development Without Consent and Miscellaneous Complying Development

This policy permits minor development and activities on land without a development application or through alternative assessment. This policy should be read in conjunction with Councils controls for Exempt and Complying Development.

State Environmental Planning Policy - Housing For Seniors Or People With a Disability 2004

State Environmental Planning Policy No. 5 - Housing for Older People and People with a Disability has been repealed by a new State Environmental Planning Policy (SEPP) - Seniors Living 2004, which was renamed to SEPP (Housing for Seniors or People with a Disability) 2004 effective from 12 October 2007. The new SEPP sets out standards and design requirements for self-care housing, "serviced" self-care housing, vertical villages, residential care facilities and hostels. The Policy recognises that demand for these forms of housing will grow over the next 10 - 15 years. It encourages the development of high quality accommodation for our ageing population and for people who have disabilities - housing that is in keeping with the local neighbourhood.

State Environmental Planning Policy No. 6 - Number of Storeys in a Building

This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

State Environmental Planning Policy No. 19 - Bushland in Urban Areas

This policy protects and preserves bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. The policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

State Environmental Planning Policy No. 22 - Shops and Commercial Premises

The policy permits within a business zone, a change of use from one kind of shop to another or one kind of commercial premises to another, even if the change of use is prohibited under an environmental planning instrument. Development consent must be obtained and the consent authority satisfied that the change of use will have no, or only minor, environmental effect.

State Environmental Planning Policy No. 30 - Intensive Agriculture

This policy requires development consent for cattle feedlots having a capacity of 50 or more cattle or piggeries having a capacity of 200 or more pigs. The policy sets out information and public notification requirements to ensure there are effective planning control over this export-driven rural industry. The policy does not alter if, and where, such development is permitted, or the functions of the consent authority.

State Environmental Planning Policy No. 32 - Urban Consolidation (Redevelopment of Land)

This policy states the Government's intention to ensure that urban consolidation objectives are met in all urban areas throughout the State. The policy focuses on the redevelopment of urban land that is no longer required for the purpose it is currently zoned or used and encourages local councils to pursue their own urban consolidation strategies to help implement the aims and objectives of the policy. Councils will continue to be responsible for the majority of rezonings. The policy sets out guidelines for the Minister to follow when considering whether to initiate a regional environmental plan (REP) to make particular sites available for consolidated urban redevelopment. Where a site is rezoned by an REP, the Minister will be the consent authority.

State Environmental Planning Policy No. 55 - Remediation of Land

This policy provides state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals.

State Environmental Planning Policy No. 62 - Sustainable Aquaculture

This policy encourages the sustainable expansion of the industry in NSW. The policy implements the regional strategies already developed by creating a simple approach to identity and categorise aquaculture development on the basis of its potential environmental impact. The SEPP also identifies aquaculture development as a designated development only where there are potential environmental risks.

State Environmental Planning Policy No. 64 - Advertising and Signage

This policy aims to ensure that outdoor advertising is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of high quality design and finish. The SEPP was amended in August 2007 to permit and regulate outdoor advertising in transport corridors (e.g. freeways, tollways and rail corridors). The amended SEPP also aims to ensure that public benefits may be derived from advertising along and adjacent to transport corridors.

State Environmental Planning Policy - Affordable Rental Housing 2009

This policy establishes a consistent planning regime for the provision of affordable rental housing. The policy provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers. It also aims to support local centres by providing housing for workers close to places of work, and facilitate development of housing for the homeless and other disadvantaged people.

State Environmental Planning Policy - Exempt and Complying Development Codes

This policy streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

State Environmental Planning Policy - Major Development 2005

The SEPP facilitates the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State. Schedule 3 of the SEPP identifies State significant sites and provides planning provisions for those sites. Note: This SEPP was formerly known as State Environmental Planning Policy (Major Projects) 2005.

State Environmental Planning Policy - Sydney Region Growth Centres 2006

This policy provides for the co-ordinated release of land for residential, employment and other urban development in the North West and South West Growth Centres of the Sydney Region (in conjunction with the Environmental Planning and Assessment Regulation relating to precinct planning). The policy identifies certain land as being within a residential, employment, environmental, recreation or infrastructure zone.

State Environmental Planning Policy - Basix

This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure the effective introduction of BASIX in NSW. The SEPP ensures consistency in the implementation of BASIX throughout the State by overriding competing provisions in other environmental planning instruments and development control plans, and specifying that SEPP 1 does not apply in relation to any development standard arising under BASIX. The draft SEPP was exhibited together with draft Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004.

State Environmental Planning Policy - Infrastructure 2007

This policy provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.

State Environmental Planning Policy - Mining, Petroleum Production and Extractive Industries 2007

This policy aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the State. The policy establishes appropriate planning controls to encourage ecologically sustainable development.

State Environmental Planning Policy - Temporary Structures 2007

This policy provides for the erection of temporary structures and the use of places of public entertainment, while protecting public safety and local amenity. The SEPP supports the transfer of the regulation of places of public entertainment and temporary structures (such as tents, marquees and booths) from the Local Government Act 1993 to the Environmental Planning and Assessment Act 1979.

Sydney Regional Environmental Plan No. 9 - Extractive Industry Sydney Region

This plan aims to protect the viability of extractive resources in the Sydney Metropolitan Area by ensuring consideration is given to the impact of encroaching development.

Sydney Regional Environmental Plan No. 19 - Rouse Hill Development Area

Regional Environmental Plan No. 19 - Rouse Hill Development Area covers about 9,400 hectares in the north-west sector, north of Blacktown. The plan co-ordinates planning and decision-making for long term growth, identifying land that is suitable for urban purposes and providing for the orderly and economic development of an area within the North West Sector.

2. ZONING AND LAND USE UNDER RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS

(a) Pursuant to Blacktown Local Environmental Plan (LEP) 1988 the land is zoned:

1(a) - GENERAL RURAL

(b) Extracts from Blacktown Local Environmental Plan 1988 which specify the purposes for which development may be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

Should you require further information about the permissibility of development and related development standards it is recommended that you consult a full copy of Blacktown Local Environmental Plan 1988. It should be noted that the Environmental Planning & Assessment Act 1979, as amended, changes the way in which Blacktown Local Environmental Plan 1988 and other State Government issued environmental planning instruments should be interpreted. Pursuant to the amended Environmental Planning & Assessment Act 1979 Council's development consent is now required for all development regardless of its zoning/s, other than "exempt development" and "complying development", as defined in Blacktown Local Environmental Plan 1988.

(c) Extracts from Blacktown Local Environmental Plan 1988 which specify the purpose for which development may not be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

(d) An extract of the planning instrument at Attachment A provides details of the purposes for which development is prohibited within the zone applying to the land.

(e) Blacktown Local Environmental Plan 1988 does not nominate minimum land dimensions for the erection of a dwelling-house. It is noted however that Blacktown Development Control Plan 2006 stipulates minimum areas for subdivision, integrated housing, dual occupancies and the like.

The minimum area upon which a dwelling house may be erected is 4000 square metres.

(f) The abovementioned land is subject to the provisions of State Environmental Planning Policy (Sydney Region Growth Centres) 2006 and is zoned:

B5 - BUSINESS DEVELOPMENT
R2 - LOW DENSITY RESIDENTIAL
SP2 - INFRASTRUCTURE - LOCAL DRAINAGE
E2 - ENVIRONMENTAL CONSERVATION
SP2 - INFRASTRUCTURE - CLASSIFIED ROAD

(g) Extracts from the environmental planning instrument which specify the purposes for which development may be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

Should you require further information about the permissibility of development and related development standards it is recommended that you consult a full copy of the environmental planning instrument.

(h) Extracts from the environmental planning instrument which specify the purpose for which development may not be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

(i) An extract of the planning instrument at Attachment A provides details of the purposes for which development is prohibited within the zone applying to the land.

(j) The environmental planning instrument does not nominate minimum land dimensions for the erection of a dwelling-house. It does however provide minimum land areas for the erection of a dwelling-house and stipulates that a dwelling must not be erected on land in the Riverstone Scheduled Lands on any lot with a depth that exceeds 35 metres.

(k) The land does not include or comprise a critical habitat. Critical habitat refers to habitat that is critical to the survival of endangered species, populations or ecological communities. Areas of critical habitat are declared under Part 3 of the Threatened Species Conservation Act 1995 and Part 7A of the Fisheries Management Act 1994.

(l) The land is not within a conservation area.

(m) This land does not contain a heritage item under the protection of an environmental planning instrument.

3. COMPLYING DEVELOPMENT

Complying Development under the *General Housing Code* of the Codes SEPP may be carried out on the land, unless it is on part of the lot that is identified as high risk bush fire prone land and/or in a high risk or high hazard flood area.

Complying Development under the *Rural Housing Code* of the Codes SEPP may be carried out on the land, unless it is on part of the lot that is identified as high risk bush fire prone land and/or in a high risk or high hazard flood area.

Complying Development under the *Housing Alterations Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *General Development Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *General Commercial and Industrial Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *Subdivisions Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *Demolition Code* of the Codes SEPP may be carried out on the land.

Disclaimer: This information only addresses matters raised in Clauses 1.17A and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. It is your responsibility to ensure that you comply with the general requirements of the State Environmental Planning Policy (Exempt and Complying Codes) 2008. Failure to comply with these provisions may mean that a Complying Development Certificate issued under the provisions of State Environmental Planning Policy (Exempt and Complying Codes) 2008 is invalid.

4. COASTAL PROTECTION

The land is not affected by the operation of Sections 38 or 39 of the *Coastal Protection Act, 1979.*

5. MINE SUBSIDENCE

The land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act, 1961.*

6. ROAD WIDENING AND ROAD REALIGNMENT

The NSW Government's Blacktown City Council Growth Centre Precincts Development Control Plan 2010 nominates preferred road patterns in this part of the City.

The land is affected by road widening/road realignment under Division 2 of Part 3 of the Roads Act 1993 and/or environmental planning instrument.

The land is affected by a road pattern.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Council has not adopted any policies to restrict the development of the land by reason of the likelihood of landslip, bushfire, tidal inundation, subsidence or the occurrence of acid sulphate soils. Although the Council has not adopted a specific policy to restrict development on bush fire prone land, it is bound by statewide bush fire legislation that may restrict development. In this regard, refer to point 11 below.

Council has adopted a policy on contaminated land which may restrict the development of this land. The land contamination policy applies when zoning or land use changes are proposed on land which has previously been used for certain purposes or has the potential to be affected by such purposes undertaken on nearby lands. Council's records may not be sufficient to determine all previous uses on the land, or determine activities that may have taken place on this land. Consideration of Council's policy and the application of provisions under the relevant State legislation and guidelines is necessary.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

In respect of mainstream or backwater flood-related development controls, Council has adopted a Floodplain Management Policy which may restrict the development of the land subject to this Certificate, including development for the purposes of dwelling houses, dual occupancies, multi-dwelling housing, residential flat buildings and any other purpose that requires the placement or erection of any structure on the land. The Flood Risk Precinct Maps prepared under the policy are based on the results of Engineering Flood Studies commissioned by Government Authorities and Council. These maps indicate that the land subject to this Certificate lies partly within the Medium Flood Risk Precinct and partly within the High Flood Risk Precinct. The term Medium Flood Risk Precinct is defined as land below the 100-year flood level that is not within a High Flood Risk Precinct. This is land that is not subject to a high hydraulic hazard or where there are no significant evacuation difficulties. The term High Flood Risk Precinct is defined as the area of land below the 100-year flood event that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties. Further details are provided in the NSW Government's Floodplain Development Manual and are available from Council. Council does not warrant that the information provided or made available to you is complete. Council strongly recommends that, in all cases, you seek independent professional advice to supplement your enquiries.

This lot is shown flood prone on mapping provided by the Department of Planning. The investigation for this area has not been completed and all enquiries should be directed to the Department of Planning. Flood related development controls for this lot are provided in the Development Control Plan for this area, prepared by the Department of Planning. Where development is proposed within or adjacent to land that is shown on the Flood Prone Land figure as being affected by the 1% AEP level, Council may require a more detailed flood study to be undertaken by the applicant to confirm the extent on the flood affectation on that land.

8. LAND RESERVED FOR ACQUISITION

Clause 5.1 of Appendix 4 (Alex Ave and Riverstone Precinct Plan 2010) of State Environmental Planning Policy (Sydney Region Growth Centres) 2006 provides for the acquisition of certain land zoned RE1, SP2 and E2 by a public authority.

Draft Blacktown Local Environmental Plan 2013 makes provision for land included on the Land Reservation Acquisition Map to be acquired by a public authority.

9. CONTRIBUTIONS PLANS

Council currently levies contributions under Section 94 of the EP&A Act 1979 for facilities and services. The further development of the subject land may incur such contribution.

This Property is affected by Section 94 Contributions Plan No. 21 - Marsden Park Industrial Precinct.

This property is affected by a Special Infrastructure Contribution which is designed to levy a special contribution in order to coordinate strategic land use planning with the provision of state or regional infrastructure in the Western Sydney Growth Areas.

9A. BIODIVERSITY CERTIFIED LAND

The land is biodiversity certified within the meaning of the Threatened Species Conservation Act 1995.

10. BIOBANKING AGREEMENTS

Council has not been notified of the existence of a biodiversity agreement under the Threatened Species Conservation Act 1995.

11. BUSH FIRE PRONE LAND

The *Rural Fires and Environmental Assessment Legislation Amendment Act 2002*, which came into force on 1 August 2002, introduced development provisions for bush fire prone land as shown on a Bush Fire Prone Land Map. "Bush fire prone land" is land that has been designated by the Commissioner of the NSW Rural Fire Service as being bush fire prone due to characteristics of vegetation and topography. The land the subject of this certificate has been identified on Council's Bush Fire Prone Land Map as being:

Category 1 Type Vegetation

within 100m buffer around Category 1

On land that is bush fire prone, certain development may require further consideration under Section 79BA or Section 91 of the EP&A Act 1979 and under Section 100B of the *Rural Fires Act 1997*.

12. PROPERTY VEGETATION PLANS

Land to which this Certificate applies is not subject to a Property Vegetation Plan under the provisions of the *Native Vegetation Act 2003*.

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Land to which this Certificate applies is not the subject of an order made under the *Trees (Disputes Between Neighbours) Act 2006*.

14. DIRECTIONS UNDER PART 3A

Land to which this Certificate applies is not subject to the above.

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

Land to which this Certificate applies is not subject to the above.

16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

Land to which this Certificate applies is not subject to the above.

17. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

Land to which this Certificate applies is not subject to the above.

18. MATTERS ARISING UNDER THE CONTAMINATED LAND MANAGEMENT ACT 1997 AND CONTAMINATED LAND MANAGEMENT AMENDMENT ACT 2008

(a) The land to which this certificate relates has not been declared to be significantly contaminated land at the date when the certificate was issued.

(b) The land to which the certificate relates is not subject to a management order at the date when the certificate was issued.

(c) The land to which this certificate relates is not the subject of an approved voluntary management proposal at the date when the certificate was issued.

(d) The land to which this certificate relates is not subject to an ongoing maintenance order as at the date when the certificate was issued.

(e) The land to which this certificate relates is not the subject of a site audit statement provided to the Council.

PART B
ADDITIONAL INFORMATION PROVIDED PURSUANT TO SECTION 149(5) OF THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 (EP&A Act 1979)*

NOTE: When information pursuant to section 149(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 149(6) which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.

This advice is provided in accordance with Section 149(5) and 149(6) of the EP&A Act 1979:

The land is affected by a tree preservation control under Blacktown Local Environmental Plan 1988. A person shall not ringbark, cut down, lop, top, remove, injure or wilfully destroy any tree, or cause any tree to be ringbarked, cut down, topped, lopped, injured or wilfully destroyed, except with the consent of the Council.

The provisions of any covenant, agreement or instrument applying to this land purporting to restrict or prohibit certain development may be inconsistent with the provisions of a Regional Environmental Plan, State Environmental Planning Policy or Blacktown Local Environmental Plan 1988, in which case the provisions of any such covenant, agreement or instrument may be overridden.

This land contains an Aboriginal archaeological site under the protection of the National Parks and Wildlife Service Act, 1974. Before any development can proceed in an area known to contain Aboriginal archaeological sites, a consent to destroy must be obtained from the Director of the National Parks and Wildlife Service.

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* provides protection for items of national significance. The Act requires a separate Commonwealth approval to be obtained where an action is likely to have significant impacts on items of national environmental significance. Items of national environmental significance include, amongst other things, nationally threatened animal and plant species and ecological communitites. The Commonwealth Department of the Environment and Water Resources should be contacted for further advice.

General Manager

Per: _____

End of Certificate

Blacktown City Council

PLANNING CERTIFICATE UNDER SECTION 149

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Certificate No.: **13-5940**
Date: **18 SEP 2013**
Page: **1 of 10**
Enquiries: **s149 Clerk**
Applicants Ref.: **647244 - D LA-MARSDEN PARK**

Applicant JENNERS TITLE SEARCHING CO
DX 779
SYDNEY

Property LOT 8 DP 27536

TOWNSON ROAD,

Suburb MARSDEN PARK Parish of Gidley

NOTE: **The land the subject of this Certificate is known to be located in the suburb of Marsden Park. For all correspondence and property transactions this suburb name is to be used.**

PART A
PRESCRIBED INFORMATION PROVIDED PURSUANT TO SECTION 149(2) OF THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 (EP&A Act 1979)*

NOTE: The following information is provided pursuant to Section 149(2) of the EP&A Act 1979, as prescribed by Schedule 4 of the *Environmental Planning and Assessment Regulation 2000*, and is applicable as of the date of this certificate.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DEVELOPMENT CONTROL PLANS

1.1 Environmental Planning Instruments

The abovementioned land is affected by the following environmental planning instrument and proposed environmental planning instrument/s (where applicable) which have been the subject of community consultation or on public exhibition under the Act.

Blacktown Local Environmental Plan 1988 **(Refer to Attachment A)**

Blacktown Local Environmental Plan 1988 specifies the purposes for which development may be carried out or are prohibited.

Draft Blacktown Local Environmental Plan 2013 **(Refer to Attachment B)**

Blacktown City Council has a draft City-wide Local Environmental Plan, known as Draft Blacktown Local Environmental Plan (BLEP) 2013, which will eventually replace the existing BLEP 1988. Draft BLEP 2013 has been prepared in accordance with the NSW State Government's Standard Instrument (Local Environmental Plans) Order 2006. Under Draft BLEP 2013 it is proposed to zone the land:

RU4 - PRIMARY PRODUCTION SMALL LOTS
SP2 - INFRASTRUCTURE - LOCAL ROAD

Draft BLEP 2013 specifies the purposes for which development may be carried out (either with or without the need for development consent) or which are prohibited in the zone proposed to apply to the land.

1.2 Development Control Plans

The land is affected by Blacktown Development Control Plan (DCP) 2006.

This DCP provides general guidance for the development of land within the City of Blacktown.

1.3 Relevant State Environmental Planning Policies (SEPPs), including draft policies, or Regional Environmental Plans deemed to be SEPPs

State Environmental Planning Policy No. 1 - Development Standards

The policy requires that variations to development standards must meet the objectives of local plans and controls. It makes development standards more flexible. It allows councils to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

State Environmental Planning Policy No. 4 - Development Without Consent and Miscellaneous Complying Development

This policy permits minor development and activities on land without a development application or through alternative assessment. This policy should be read in conjunction with Councils controls for Exempt and Complying Development.

State Environmental Planning Policy - Housing For Seniors Or People With a Disability 2004

State Environmental Planning Policy No. 5 - Housing for Older People and People with a Disability has been repealed by a new State Environmental Planning Policy (SEPP) - Seniors Living 2004, which was renamed to SEPP (Housing for Seniors or People with a Disability) 2004 effective from 12 October 2007. The new SEPP sets out standards and design requirements for self-care housing, "serviced" self-care housing, vertical villages, residential care facilities and hostels. The Policy recognises that demand for these forms of housing will grow over the next 10 - 15 years. It encourages the development of high quality accommodation for our ageing population and for people who have disabilities - housing that is in keeping with the local neighbourhood.

State Environmental Planning Policy No. 6 - Number of Storeys in a Building

This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

State Environmental Planning Policy No. 19 - Bushland in Urban Areas

This policy protects and preserves bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. The policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

State Environmental Planning Policy No. 30 - Intensive Agriculture

This policy requires development consent for cattle feedlots having a capacity of 50 or more cattle or piggeries having a capacity of 200 or more pigs. The policy sets out information and public notification requirements to ensure there are effective planning control over this export-driven rural industry. The policy does not alter if, and where, such development is permitted, or the functions of the consent authority.

State Environmental Planning Policy No. 32 - Urban Consolidation (Redevelopment of Land)

This policy states the Government's intention to ensure that urban consolidation objectives are met in all urban areas throughout the State. The policy focuses on the redevelopment of urban land that is no longer required for the purpose it is currently zoned or used and encourages local councils to pursue their own urban consolidation strategies to help implement the aims and objectives of the policy. Councils will continue to be responsible for the majority of rezonings. The policy sets out guidelines for the Minister to follow when considering whether to initiate a regional environmental plan (REP) to make particular sites available for consolidated urban redevelopment. Where a site is rezoned by an REP, the Minister will be the consent authority.

State Environmental Planning Policy No. 55 - Remediation of Land

This policy provides state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals.

State Environmental Planning Policy No. 62 - Sustainable Aquaculture

This policy encourages the sustainable expansion of the industry in NSW. The policy implements the regional strategies already developed by creating a simple approach to identity and categorise aquaculture development on the basis of its potential environmental impact. The SEPP also identifies aquaculture development as a designated development only where there are potential environmental risks.

State Environmental Planning Policy No. 64 - Advertising and Signage

This policy aims to ensure that outdoor advertising is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of high quality design and finish. The SEPP was amended in August 2007 to permit and regulate outdoor advertising in transport corridors (e.g. freeways, tollways and rail corridors). The amended SEPP also aims to ensure that public benefits may be derived from advertising along and adjacent to transport corridors.

State Environmental Planning Policy - Affordable Rental Housing 2009

This policy establishes a consistent planning regime for the provision of affordable rental housing. The policy provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers. It also aims to support local centres by providing housing for workers close to places of work, and facilitate development of housing for the homeless and other disadvantaged people.

State Environmental Planning Policy - Exempt and Complying Development Codes

This policy streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

State Environmental Planning Policy - Major Development 2005

The SEPP facilitates the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State. Schedule 3 of the SEPP identifies State significant sites and provides planning provisions for those sites. Note: This SEPP was formerly known as State Environmental Planning Policy (Major Projects) 2005.

State Environmental Planning Policy - Sydney Region Growth Centres 2006

This policy provides for the co-ordinated release of land for residential, employment and other urban development in the North West and South West Growth Centres of the Sydney Region (in conjunction with the Environmental Planning and Assessment Regulation relating to precinct planning). The policy identifies certain land as being within a residential, employment, environmental, recreation or infrastructure zone.

State Environmental Planning Policy - Basix

This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure the effective introduction of BASIX in NSW. The SEPP ensures consistency in the implementation of BASIX throughout the State by overriding competing provisions in other environmental planning instruments and development control plans, and specifying that SEPP 1 does not apply in relation to any development standard arising under BASIX. The draft SEPP was exhibited together with draft Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004.

State Environmental Planning Policy - Infrastructure 2007

This policy provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.

State Environmental Planning Policy - Mining, Petroleum Production and Extractive Industries 2007

This policy aims to provide for the proper management and development of mineral, petroleum and extractive material resources for the social and economic welfare of the State. The policy establishes appropriate planning controls to encourage ecologically sustainable development.

State Environmental Planning Policy - Temporary Structures 2007

This policy provides for the erection of temporary structures and the use of places of public entertainment, while protecting public safety and local amenity. The SEPP supports the transfer of the regulation of places of public entertainment and temporary structures (such as tents, marquees and booths) from the Local Government Act 1993 to the Environmental Planning and Assessment Act 1979.

Sydney Regional Environmental Plan No. 9 - Extractive Industry Sydney Region

This plan aims to protect the viability of extractive resources in the Sydney Metropolitan Area by ensuring consideration is given to the impact of encroaching development.

Sydney Regional Environmental Plan No. 19 - Rouse Hill Development Area

Regional Environmental Plan No. 19 - Rouse Hill Development Area covers about 9,400 hectares in the north-west sector, north of Blacktown. The plan co-ordinates planning and decision-making for long term growth, identifying land that is suitable for urban purposes and providing for the orderly and economic development of an area within the North West Sector.

2. ZONING AND LAND USE UNDER RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS

(a) Pursuant to Blacktown Local Environmental Plan (LEP) 1988 the land is zoned:

1(a) - GENERAL RURAL
5(c) - SPECIAL USES - LOCAL ROAD AND LOCAL ROAD WIDENING

(b) Extracts from Blacktown Local Environmental Plan 1988 which specify the purposes for which development may be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

Should you require further information about the permissibility of development and related development standards it is recommended that you consult a full copy of Blacktown Local Environmental Plan 1988. It should be noted that the Environmental Planning & Assessment Act 1979, as amended, changes the way in which Blacktown Local Environmental Plan 1988 and other State Government issued environmental planning instruments should be interpreted. Pursuant to the amended Environmental Planning & Assessment Act 1979 Council's development consent is now required for all development regardless of its zoning/s, other than "exempt development" and "complying development", as defined in Blacktown Local Environmental Plan 1988.

(c) Extracts from Blacktown Local Environmental Plan 1988 which specify the purpose for which development may not be carried out within the zone/s applying to the land the subject of this Certificate are at Attachment A.

(d) An extract of the planning instrument at Attachment A provides details of the purposes for which development is prohibited within the zone applying to the land.

(e) Blacktown Local Environmental Plan 1988 does not nominate minimum land dimensions for the erection of a dwelling-house. It is noted however that Blacktown Development Control Plan 2006 stipulates minimum areas for subdivision, integrated housing, dual occupancies and the like.

The minimum area upon which a dwelling house may be erected is 4000 square metres.

(f) The land does not include or comprise a critical habitat. Critical habitat refers to habitat that is critical to the survival of endangered species, populations or ecological communities. Areas of critical habitat are declared under Part 3 of the Threatened Species Conservation Act 1995 and Part 7A of the Fisheries Management Act 1994.

(g) The land is not within a conservation area.

(h) This land does not contain an item of environmental heritage under the protection of Blacktown Local Environmental Plan 1988.

3. COMPLYING DEVELOPMENT

Complying Development under the *General Housing Code* of the Codes SEPP may be carried out on the land, unless it is on part of the lot that is identified as high risk bush fire prone land.

Complying Development under the *Rural Housing Code* of the Codes SEPP may be carried out on the land, unless it is on part of the lot that is identified as high risk bush fire prone land.

Complying Development under the *Housing Alterations Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *General Development Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *General Commercial and Industrial Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *Subdivisions Code* of the Codes SEPP may be carried out on the land.

Complying Development under the *Demolition Code* of the Codes SEPP may be carried out on the land.

Disclaimer: This information only addresses matters raised in Clauses 1.17A and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. It is your responsibility to ensure that you comply with the general requirements of the State Environmental Planning Policy (Exempt and Complying Codes) 2008. Failure to comply with these provisions may mean that a Complying Development Certificate issued under the provisions of State Environmental Planning Policy (Exempt and Complying Codes) 2008 is invalid.

4. COASTAL PROTECTION

The land is not affected by the operation of Sections 38 or 39 of the *Coastal Protection Act, 1979.*

5. MINE SUBSIDENCE

The land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act, 1961.*

6. ROAD WIDENING AND ROAD REALIGNMENT

Blacktown Local Environmental Plan 1988 and Blacktown Development Control Plan 2006 nominate preferred road patterns throughout the City.

The land is affected by road widening/road realignment under Division 2 of Part 3 of the Roads Act 1993 and/or environmental planning instrument.

7. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Council has not adopted any policies to restrict the development of the land by reason of the likelihood of landslip, bushfire, tidal inundation, subsidence or the occurrence of acid sulphate soils. Although the Council has not adopted a specific policy to restrict development on bush fire prone land, it is bound by statewide bush fire legislation that may restrict development. In this regard, refer to point 11 below.

Council has adopted a policy on contaminated land which may restrict the development of this land. The land contamination policy applies when zoning or land use changes are proposed on land which has previously been used for certain purposes or has the potential to be affected by such purposes undertaken on nearby lands. Council's records may not be sufficient to determine all previous uses on the land, or determine activities that may have taken place on this land. Consideration of Council's policy and the application of provisions under the relevant State legislation and guidelines is necessary.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

There are currently no mainstream or backwater flood-related development controls adopted by Council that apply to the land subject to this Certificate.

8. LAND RESERVED FOR ACQUISITION

Clauses 17, 17A and 18 of Blacktown Local Environmental Plan 1988 provide for the acquisition of certain land zoned 5(a), 5(b), 5(c), 6(a) or 6(c) by a public authority.

The proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority.

9. CONTRIBUTIONS PLANS

Council currently levies contributions under Section 94 of the EP&A Act 1979 for facilities and services. The further development of the subject land may incur such contribution.

9A. BIODIVERSITY CERTIFIED LAND

The land is biodiversity certified within the meaning of the Threatened Species Conservation Act 1995.

10. BIOBANKING AGREEMENTS

Council has not been notified of the existence of a biodiversity agreement under the Threatened Species Conservation Act 1995.

11. BUSH FIRE PRONE LAND

The *Rural Fires and Environmental Assessment Legislation Amendment Act 2002*, which came into force on 1 August 2002, introduced development provisions for bush fire prone land as shown on a Bush Fire Prone Land Map. "Bush fire prone land" is land that has been designated by the Commissioner of the NSW Rural Fire Service as being bush fire prone due to characteristics of vegetation and topography. The land the subject of this certificate has been identified on Council's Bush Fire Prone Land Map as being:

Category 1 Type Vegetation

within 100m buffer around Category 1

On land that is bush fire prone, certain development may require further consideration under Section 79BA or Section 91 of the EP&A Act 1979 and under Section 100B of the *Rural Fires Act 1997.*

12. PROPERTY VEGETATION PLANS

Land to which this Certificate applies is not subject to a Property Vegetation Plan under the provisions of the *Native Vegetation Act 2003.*

13. ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

Land to which this Certificate applies is not the subject of an order made under the *Trees (Disputes Between Neighbours) Act 2006.*

14. DIRECTIONS UNDER PART 3A

Land to which this Certificate applies is not subject to the above.

15. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR SENIORS HOUSING

Land to which this Certificate applies is not subject to the above.

16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

Land to which this Certificate applies is not subject to the above.

17. SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

Land to which this Certificate applies is not subject to the above.

18. MATTERS ARISING UNDER THE CONTAMINATED LAND MANAGEMENT ACT 1997 AND CONTAMINATED LAND MANAGEMENT AMENDMENT ACT 2008

(a) The land to which this certificate relates has not been declared to be significantly contaminated land at the date when the certificate was issued.

(b) The land to which the certificate relates is not subject to a management order at the date when the certificate was issued.

(c) The land to which this certificate relates is not the subject of an approved voluntary management proposal at the date when the certificate was issued.

(d) The land to which this certificate relates is not subject to an ongoing maintenance order as at the date when the certificate was issued.

(e) The land to which this certificate relates is not the subject of a site audit statement provided to the Council.

PART B
ADDITIONAL INFORMATION PROVIDED PURSUANT TO SECTION 149(5) OF THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 (EP&A Act 1979)*

NOTE: When information pursuant to section 149(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 149(6) which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.

This advice is provided in accordance with Section 149(5) and 149(6) of the EP&A Act 1979:

The land is affected by a tree preservation control under Blacktown Local Environmental Plan 1988. A person shall not ringbark, cut down, lop, top, remove, injure or wilfully destroy any tree, or cause any tree to be ringbarked, cut down, topped, lopped, injured or wilfully destroyed, except with the consent of the Council.

The provisions of any covenant, agreement or instrument applying to this land purporting to restrict or prohibit certain development may be inconsistent with the provisions of a Regional Environmental Plan, State Environmental Planning Policy or Blacktown Local Environmental Plan 1988, in which case the provisions of any such covenant, agreement or instrument may be overridden.

This land may contain an Aboriginal archaeological site under the protection of the National Parks and Wildlife Service Act, 1974. Before any development can proceed in an area known to contain Aboriginal archaeological sites, a consent to destroy must be obtained from the Director of the National Parks and Wildlife Service.

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* provides protection for items of national significance. The Act requires a separate Commonwealth approval to be obtained where an action is likely to have significant impacts on items of national environmental significance. Items of national environmental significance include, amongst other things, nationally threatened animal and plant species and ecological communitites. The Commonwealth Department of the Environment and Water Resources should be contacted for further advice.

General Manager

Per: _____

End of Certificate

Blacktown City Council

RURAL LANDFILL POLICY

BACKGROUND

Activities associated with illegal landfilling are a common form of unauthorised activity within the Blacktown City. Such incidents often occur as land owners and/or occupants are uncertain of activities that are allowed on land, and this can be compounded if construction and demolition industry contractors seek to avoid associated waste disposal costs. Illegal landfill activity also occurs as the result of owners seeking to develop on low-lying property, often flood affected or traversed by a stormwater drainage system or watercourse.

Council is also aware of "sham" applications associated with the illegal placement of landfill. In the past these have been disguised as 'filling a dam' or 'constructing a dam' for the purpose of 'landfill' or 'extraction' purposes. Council considers such applications with caution. This policy allows a rigorous assessment of all landfill applications. Strict criteria must be ratified before approval is obtained.

Activities associated with illegal landfilling/excavation can have adverse effects, such as changes to existing overland flow patterns, increased flood levels, land instability and sedimentation. These can negatively affect upstream and downstream land owners. Council has sought to address these issues through a Rural Landfill Policy. However, this Policy may also apply at Council's discretion to land situated within the commercial and industrial zones in instances where a site comprises rural remnant land (ie. land of a rural nature that is not zoned rural).

Specifically, as a key requirement of this Policy, Council requests that the **purpose of any related landfill activity** is clearly stated on the Development Application and accompanying documentation. Furthermore, Council has **a clearly stated requirement for a neutral net cut/landfill approach**, the details of which are outlined within this Policy.

1.0 SCOPE

This Rural Landfill Policy outlines the requirements for undertaking activities associated with landfill on rural lands within the City of Blacktown.

1.1 Aims

The aims of this Policy are to:

- provide guidelines with respect to proposed landfill activities;
- promote acceptable bulk earthworks practices for building site preparation;
- control and minimise variations to natural ground levels; and
- ensure that any landfill-related activity does not independently or cumulatively adversely affect the environment.

1.2 Objectives

The main objectives of the Policy are to ensure that all landfill activity:

- enhances a development and/or use of land;
- does not adversely affect local stormwater drainage or change floodplain characteristics;
- does not contaminate land;
- utilises clean material where landfilling is required;
- is suitably treated to minimise soil erosion and weed infestation;
- provides for the installation of sedimentation controls to minimise the potential for water pollution;
- does not injure or destroy any tree;
- considers the visual impact on a locality by complementing adjoining land features;
- does not adversely affect the health and safety of any person; and
- considers the relevant State and Commonwealth Government legislative requirements, appropriate guidelines and Council policies.

2.0 WHAT IS LANDFILL?

Landfill involves the deposition of soil or other material on a site after it has been excavated/cut and transported from another location, whether on-site or off-site.

Some examples of landfill activities include:

- reshaping an area of land, dam or floodway (involving cutting, grading, excavating or landfilling);
- rural earthdams;
- retaining walls; and
- building platforms.

Unless these activities are "Exempt Development" as described in Schedule 6 of Blacktown Local Environmental Plan 1988 (refer to Appendix B), development approval ***must*** be obtained from Council under the provisions of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*.

A Development Application for landfilling could also constitute "Integrated Development" and/or "Designated Development" pursuant to Schedule 3 of the EPA

Act and Regulations. Separate additional requirements will need to be met if these legislative requirements apply.

3.0 BLACKTOWN LOCAL ENVIRONMENTAL PLAN 1988

The Blacktown Local Environmental Plan (BLEP) 1988 prescribes the requirements for all development activities within the Blacktown City Council area.

Under BLEP 1988 there is only one instance concerning landfill where development approval is not required from Council. These requirements are set out within Schedule 6 (BLEP) under *retaining wall*. The criteria are reproduced in Appendix B.

If the activity involving landfill does not fall within the *retaining wall* criteria listed in Schedule 6, approval ***must*** be obtained from Council.

4.0 GENERAL REQUIREMENTS

A person who undertakes any landfill activity will have to demonstrate through the application process that they have considered the potential impacts on:

- soil erosion and sedimentation;
- flooding/floodways/stormwater runoff;
- groundwater/surface water;
- contaminated material (existing or imported);
- existing trees and vegetation;
- water pollution;
- dust (air pollution); and
- development consent/Construction Certificate requirements.

These requirements are explained in Sections 4.2 to 4.4 of this Policy.

Also, landfilled areas must:

- comprise of clean material free from contamination (imported material shall be "Virgin Excavated Natural Material (VENM)" as defined in Appendix A);
- be suitably compacted and stabilised with density tests to verify that compaction was achieved;
- be revegetated where appropriate; and
- be provided with soil erosion and sedimentation controls in accordance with Council's "Soil Erosion and Sediment Control Policy".

4.1 Relevant Policies, Legislation and Guidelines

There is a range of Council policies, State Government legislation and guidelines that place obligations on any person who undertakes landfill-related activities. These are set out below.

Blacktown City Council Policies and Planning Instruments

- BLEP 1988 – Exempt Development.
- Contaminated Lands Policy.

- "Control of Development on Flood Prone Land", section 8.4 of Part A DCP 1992.
- Eastern Creek Floodplain Management Study and Plan 1996.
- Site Waste Management and Minimisation Development Control Plan.
- Soil Erosion and Sediment Control Policy.
- South Creek Floodplain Management Study 1999.

State Legislation and Guidelines

The following New South Wales legislation may place an obligation on any person who undertakes any excavation/landfill activities, namely:

- Contaminated Land Management Act 1994.
- Environmental Planning and Assessment Act 1979 and Regulations 2000.
- Fisheries Management Act 1994.
- Local Government Act 1993.
- National Parks and Wildlife Act 1994.
- New South Wales Floodplain Management Manual: the management of flood liable land (January 2001).
- Protection of the Environment Operations Act 1997.
- Rivers and Foreshores Improvement Act 1948.
- Soil Conservation Act 1938.
- Sydney Regional Environmental Plan No.20 - Hawkesbury-Nepean River 1996.
- Threatened Species Conservation Act 1995.
- Waste Avoidance and Recovery Act 2001.

Commonwealth Legislation

The *Environment Protection and Biodiversity and Conservation Act 1999* may place an obligation on any person who undertakes any excavation/landfill activities, which is deemed to be a "Controlled Action" under the Act.

4.2 Requirements for Lodging a Development Application

There are specific planning considerations for proposed landfill activities when an applicant lodges a Development Application as outlined below.

(a) Location of Landfill

In general, landfilling within a floodplain will not be supported. However, floodplain landfill applications will be treated on their merits based on the following:

- No net loss of flood storage and/or conveyance within the floodway extents.
- No net loss of flood storage within the 1% Annual Exceedance Probability (AEP) critical duration flood. This requirement must address the cumulative impacts on flood levels from "like" development on other areas of the floodplain.
- The alternation of local drainage or overland flow contours and/or natural watercourses must not adversely affect adjacent property.

Council may require the undertaking of detailed hydrologic/hydraulic modelling and survey contour plans in support of such applications.

Where landfilling is proposed within 40 metres of a watercourse, under the *Rivers and Foreshores Improvement Act 1948,* a permit under section 3(a) must be obtained from the Department of Land and Water Conservation (DLWC). Where work involves the reconstruction of creek lines, reclamation or dredging works, a separate permit will be required from the Department of Fisheries under the *Fisheries Management Act 1994.*

(b) Imported Landfill

Where landfill is proposed to be imported onto land, a report must be submitted to Council which must be prepared by a NSW Environment Protection Authority accredited Consultant. The report must verify that the landfill material is suitable for the intended use of the site having regard to the presence and levels of possible contaminants. The report is to be approved by Council prior to any earthworks commencing on the site.

(c) Slope of the Site

In the instance where landfill occurs on a site where the natural slope exceeds 1 in 8 (12.5%), details of any proposed batters or retaining works shall be indicated. The proposed cross-fall for batters used in cut and landfill are to be restricted to a maximum slope of 1(V) in 4(H) (25% - the maximum slope allowable for general maintenance).

(d) Temporary Stockpiles

Where the temporary stockpiling of landfill material will occur on any land, the following matters must be addressed within a report which documents in written and plan form:

- the location and configuration of stockpiles;
- the proposed period of stockpiling;
- the quality, quantity and characteristics of stockpiled material;
- proposed height of stockpiled materials;
- land clearing and other proposed preparation requirements;
- proposed soil erosion including dust control/sedimentation control measures; and
- any potential for leaching from any stockpile and its effect on the surrounding area.

(e) Archaeological Sites

Any cut/landfill proposal can potentially damage or destroy existing Aboriginal artefacts on a site and consideration must be given to such sites.

Within Part A of Council's Development Control Plan (DCP) 1992 Council has established several different classes of archaeological sites. These are:

Known Archaeological Sites: These are sites which have been recorded by the National Parks and Wildlife Service (NPWS) and are indicated on Council's DCP maps. The applicant is required to consult with the NPWS as a condition of development consent.

Areas of High Archaeological Significance: These are sites with a high likelihood of archaeological sites occurring in these locations and are shown in detail on Council's DCP maps. The applicant is required to consult with the NPWS as a condition of development consent.

Areas of Potential Archaeological Significance: Within these areas there is a possibility of sites occurring. The applicant will be required to consult with the NPWS to determine if there are any requirements as a condition of consent.

Areas of Low Archaeological Significance: Areas other than those noted above are substantially developed. However, where it becomes the case that a site of low archaeological significance is found, development consent will require consultation with the NPWS.

It is therefore paramount that, prior to any landfill or work being determined, a relevant site be inspected by representatives of each of the three Aboriginal groups (listed below) to determine the archaeological significance of the land. This will determine if a detailed archaeological report is required by a suitably qualified archaeologist.

The three Aboriginal community groups that oversee archaeological sites in the City of Blacktown include:

- Deerubbin Local Aboriginal Land Council
- Darug Custodians Aboriginal Corporation
- Darug Tribal Association Incorporated.

Also, the bulk earthworks phase may require an inspection by a representative from either of the above groups. This would determine if there are any Aboriginal artefacts that could potentially be or have been disturbed by any earthworks undertaken.

(f) Flora and Fauna

A flora and fauna report, including an Eight Part Test under the *EP&A Act*, may be required in order to assess the likely impacts of proposed landfilling on threatened species, populations or ecological communities. Identification of any vegetation (or fauna) of significance may result in a Species Impact Assessment report to be completed in consultation with the National Parks and Wildlife Service.

Furthermore, regard should be given to Council's Tree Preservation Order within Clause 25 of BLEP 1988.

(g) Other Considerations

Should it be proposed to vary the finished ground or floor levels from those shown on the approved Development Application plans, then re-notification to neighbouring owners and residents may be required. Council may exercise its rights under Section 96 of the *EP&A Act* and seek a formal request to modify the development consent.

Furthermore, the "Environmental Impact Study Practice Guidelines – Land landfilling" is to be used when preparing an EIS. Consultation must also be undertaken with PlanningNSW.

(h) Other Consultations

Additional consultations may be required. Below is a list of the types of development that would require additional consultation:

Type of Development	*Authority*
Works to prevent flooding, such as levees	DLWC
Dam, weir or structures to impound water	DLWC
Within 40 metres of a watercourse or which diverts a watercourse or affects the quantity of water flowing into or from a river or lake	DLWC
Development involving dredging or reclamation in a waterway	NSW Department of Fisheries DLWC

4.3 Requirements for Supporting Documentation

A Development Application (DA) must be accompanied by the following supporting documents where applicable:

1. A statement providing full justification for the proposed landfilling works. The written statement should include the details of alternatives to the proposed landfilling option. This information is to be submitted with landfill/excavation activities that require Council consent.

2. Suitable plans drawn to an appropriate scale (1:100, 1:200, 1:500, 1:1000 or 1:2000 should be used to adequately define detail) and indicating:

   (a) Levels, to be provided at Australian Height Datum (AHD).

   (b) Finished (to be shown in bold) and existing or natural ground level contours are to be displayed as follows.

   Total existing ground relief over subject site:

   - <1m – contours at 100mm
   - <2m – contours at 200mm
   - >2m – contours at 500mm

   Sufficient levels to accurately define contours must be taken. Particular care should be taken at changes in grade, natural watercourses/creek lines and other major features.

   (c) The height above existing ground levels on adjoining properties are to be shown where retaining walls are used for retention of landfill on the site.

(d) Batter slopes of a maximum 5(horizontal) to 1(vertical) are to be shown for the tapering edges of landfilling works, where no retaining walls are intended.

3. Tree Survey, showing existing trees on the site may be required as part of the site plan to identify vegetation species and their location.

4. Traffic Report, detailing the transportation of landfill, may be required, dependent on the volume of landfill required to be transported to a site.

5. Hydraulic/Hydrological Report by a chartered professional Civil Engineer or equivalent, which addresses cumulative impacts (e.g. the displacement of flood storage and affect on flood levels in flood liable areafs) may be required.

6. Soil Contamination Report may be required to identify the source of the landfill. Such a report would need to be prepared by a NSW Environment Protection Authority accredited Consultant.

4.4 Operational Compliance

Where Council has granted consent to a Development Application, and all works have taken place, Council may request evidence of compliance. This could be in the form of:

- Works as Executed Plans;
- Site "free from contamination" verification/certification;
- Surveyor's report; and
- Certification of hydraulic recommendation,

from suitably qualified persons.

5.0 PENALTIES AND FINES

Non-compliance with the provisions of this Policy and/or conditions of approval may result in the serving of a Notice/Order under Section 121 of the *EP&A Act*. In addition, Section 124 of the *Local Government Act 1993* may require remedial work to be carried out. Infringement notices may also be issued and other action instituted under the *Protection of the Environment Operations Act 1997*.

Also, the *Waste Avoidance and Recovery Act 2001* may be initiated in situations where individuals or corporations have breached the Act by undertaking illegal waste disposal/landfill operations.

In circumstances where illegal landfill/earthworks have taken place, and that landfill is likely to result in the pollution of waterways, the matter will be referred to the appropriate authority for their independent action.

Appendix A – Definitions

Definitions or terms used within this Policy are provided below.

"1% Annual Exceedance Probability Flood" means a flood which has a 1 in 100 chance of occurring in any given year. (Source: BLEP 1988).

"Activity" means any development on land and may include any one of the following:

(a) the erection of a building; or

(b) the carrying out of a work in, on, over or under land; or

(c) the use of land or of a building or work; or

(d) the subdivision of land involving earthworks; or

(e) any soil disturbing activity in or on a public place or on land owned by Council which may or may not be the subject of an approval; or

(f) any act, matter or thing for which provision may be made under Section 26 of the *EP&A Act 1979* and which is prescribed for the purpose of this definition, but does not include:

  (i) any act, matter or thing referred to in Section 26 of the *EP&A Act* for which development consent is required or has been obtained; or

  (ii) any act, matter or thing that is prohibited under an environmental planning instrument.

(Source: Council's "Soil Erosion and Sediment Control Policy").

"Approval"/ "Approved" means a consent, licence or permission or any form of authorisation issued by Blacktown City Council. (Source: "Soil Erosion and Sediment Control Policy").

"Clean Landfill" means **Virgin Excavated Natural Material (VENM)**. Refer to separate definition.

"Contamination"/ "Contaminated Landfill" means the presence in, on or under the land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment and/or inert material such as bricks, concrete and other building debris, as well as tree roots and other organic matter (Part Source: *Contaminated Land Management Act 1994*).

"Cut/Cutting"/"Ground Excavation" means lowering the natural ground surface by the regrading and/or the removal of soil from land.

"Floodplain" means that area of land subject to inundation by floods. (Source: Floodplain Management Manual).

"Floodway" means those areas of the floodplain where a significant discharge of water occurs during floods. They are often aligned with naturally defined channels. Floodways are

areas that, even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels. (Source: Floodplain Management Manual: the anagement of Flood Liable Land).

Council's Development Control Plan 1992 (Part A) refers to a floodway as those areas:

- in which human life could be at risk from the passage of flood waters;
- which are the main flowpaths for flood waters once the river or stream has overflowed;
- in which developments may adversely affect the behaviour or passage of flood waters; and/or
- in which developments may be adversely affected by the passage of flood waters, other than by immersion.

Furthermore, Council's BLEP 1988 defines a floodway as the channel of a river or stream and those portions of land, affected by the 1% annual exceedance probability flood, adjoining the channel and which constitute the main flow path of floodwaters. Floodwaters are areas which, even if only partially blocked, would cause significant redistribution of the flood flow, which may in turn adversely affect other areas. They are often, but not necessarily, the areas of deeper flow or the areas where higher velocities occur.

"Landfill" means any work or activity which involves the placement of soil or other material on land, excluding the top dressing of lawns, whether undertaken as a principal activity or associated with another development, which in the opinion of council significantly alters the shape or drainage of land and includes any earthworks or excavation which would have similar impact, whether or not such works would involve the importation of fill (draft BLEP 2003 definition).

"Natural Ground Surface/Level" means the natural existing land surface that has not been filled, cut, excavated, reshaped or otherwise altered.

"Sediment" means material of varying size, both mineral and organic, that is being, or has been, moved from its site of origin by the action of wind, water or gravity, and comes to rest on the earth's surface either above or below sea level. (Source: Council's "Soil Erosion and Sediment Control Policy").

"Sedimentation" means the deposition of sediment, usually in such locations as a channel, along a fence line or an area of low slope, or in a gully, creek, river, sediment trap or dam. (Source: Council's "Soil Erosion and Sediment Control Policy").

"Soil" means a natural material consisting of layers, amalgamates or individual particles of mineral and/or organic constituents, of variable thickness, that differs from its parent material in morphological, physical, chemical and mineralogical properties and biological characteristics. (Source: Council's "Soil Erosion and Sediment Control Policy").

"Soil Erosion" means the detachment, entrainment, suspension and transport of soil material by wind, water or gravitational effects. (Source: Council's "Soil Erosion and Sediment Control Policy").

"Unauthorised Fill" means the deposition of fill onto a site (other than as Exempt Development under BLEP 1988), which has not received approval from Council.

"Virgin Excavated Natural Material (VENM)" means natural material such as clay, gravel, sand, soil and rock which is not mixed with any other type of waste and which has been excavated from areas of land that are not contaminated.

"Waste", as defined under the *Waste Avoidance and Recovery Act 2001,* includes any:

(i) substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or

(ii) discarded, rejected, unwanted, surplus or abandoned substance, or

(iii) otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the substance, or

(iv) substance prescribed by the regulations to be waste for the purposes of this Act.

A substance is not precluded from being waste for the purposes of the Act merely because it can be reprocessed, re-used or recycled.

Appendix B – Exempt Development

Development specified in Schedule 6 of BLEP 1988 is Exempt Development (i.e. does not require Council consent) provided it satisfies all of the applicable criteria in that Schedule. The criteria must firstly be met in Clause 9A. The criteria specifically relevant to fill or excavation has been extracted from BLEP 1988 and is provided below.

Development in Schedule 6 must ensure the development:

"(c) does not involve the removal, lopping, topping or ringbarking or a tree;

(d) does not encroach upon any easement or right-of-way;

(e) is carried out at least 1 metre from any easement or public sewer main and complies with the building over sewer requirements of Sydney Water Corporation applying to the land;

(f) is not on land that contains threatened species, threatened populations or endangered ecological communities or land that is subject to a recovery plan or threat abatement plan under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*;

(h) is not on land that is:

(i) dedicated or reserved under the *National Parks and Wildlife Act 1974*; or

(ii) dedicated or reserved under the Crown Lands Act 1989, for the preservation of flora, fauna or geological formations or for other environmental protection purposes; or

(iii) subject to an order under the *Heritage Act 1977*; or

(iv) an Aboriginal place, or contains an Aboriginal relic, under the National Parks and Wildlife Act 1974; or

(v) identified in an environmental planning instrument as a wetland, or within 20 metres or a wetland; or

(vi) an aquatic reserve declared under the Fisheries Management Act 1994; or

(vii) flood liable land; or

(viii) steeper than 33% slope; or

(ix) within an area identified as being of high archaeological significance under Blacktown Development Control Plan 1992; or

(x) contaminated, within the meaning of the *Contaminated Land Management Act 1997*; or

(xi) subject to subsidence or slip; or

(xii) within 40 metres of a waterway; or

(xiii) identified as a riverine scenic area under Sydney Regional Environmental Plan No. 20 – Hawkesbury – Nepean River (No 2 - 1997).

Note: Section 76 (3) of the *EP&A Act* says that Exempt Development cannot be carried out on land that is:

(a) critical habitat (within the meaning of the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*), or

(b) within a wilderness area (within the meaning of the Wilderness Act 1987)."

Schedule 6

Within Schedule 6, *retaining wall* is Exempt Development provided it satisfies all of the following applicable criteria:

(a) The maximum height is 900mm above the lowest adjacent ground level.

(b) Structurally adequate construction.

(c) Masonry walls comply with relevant Australian Standard.

(d) Designed and constructed so as not to interfere with the natural flow of surface water.

(e) Located a minimum 900mm horizontal distance from the property boundaries.

(f) Does not compromise the structural integrity of any adjacent structure.

(g) The dimensions of any terracing or stepping of ground incorporating a number of series of retaining walls are a maximum 900mm vertical and minimum 1.8m horizontal for any one terrace or step.

(h) Soil erosion measures are to be installed to prevent the transportation of any soil or sediment onto any adjoining property.

Rural Landfill Policy
Information Sheet

Activities associated with illegal and unauthorised landfilling are a common form of complaint within Blacktown City Council.

This often occurs as land owners and/or occupants are uncertain of activities that are allowed on land, and this can be compounded by construction and demolition industry contractors seeking to avoid waste disposal costs.

When is Council Approval Required?

There are only two instances concerning fill where development approval is not required from Council.

These are set out within Exempt Development Provisions in Schedule 6 of the Blacktown Local Environmental Plan (BLEP) 1988 under *ground excavation and/or filling* and *retaining wall,* where strict criteria applies.

If the landfilling activity does not fall within either of these two instances and fulfil all criteria listed within Schedule 6, approval ***must*** be obtained from Council.

What is Unauthorised Fill?

Unauthorised fill involves depositing fill onto a site that does not comply with the criteria listed within the Exempt Development Provisions in Schedule 6 to BLEP 1988. Unless a fill related activity complies with the criteria in the Schedule, a person who accepts fill, together with the generators and transporters of the fill, are all guilty of an offence under the *Protection of the Environment Operations Act 1997.*

Contaminated Fill

The use of contaminated fill also is a breach of the *Protection of the Environment Operations Act 1997* and is an unlawful activity under Council's "Rural Landfill Policy".

Contaminated soils often originate from old services stations, industrial sites or disused agricultural land but may also come from residential areas. Contamination also is generated from inert material such as bricks, concrete and other building debris as well as tree roots and other vegetation.

Your Legal Requirements

A person who undertakes any fill related activity is required to control:

- soil erosion and sedimentation;
- flooding/floodways/stormwater runoff;
- groundwater/surface water;
- contaminated material;
- existing trees and vegetation;
- water pollution;
- dust (air pollution);
- & obtain development consent/Construction Certificate requirements; and other matters.

There is a range of Council policies, State Government Legislation and guidelines that place obligations on any person who undertakes fill related activities. These are listed within Council's "Rural Landfill Policy".

All fill material used for land filling purposes must be:

- clean material free from contamination (referred to as "Virgin Excavated Natural Material" or VENM);
- suitably compacted and stabilised;
- revegetated where appropriate; and
- provided with soil erosion and sedimentation controls in accordance with Council's "Soil Erosion and Sediment Control Policy".

These and other requirements are explained within Council's "Rural Landfill Policy".

More information

If you are considering undertaking any fill related activity, it is recommended that you obtain a copy of Council's "Rural Landfill Policy". For further information relating to fill, please contact the relevant section of Council, below:

- Environmental Health Unit - dust, water pollution, contaminated soil;
- Engineering Approvals Team - groundwater/surface water, soil erosion/sedimentation, stabilisation, Construction Certificate requirements; and
- Development Services Unit – retaining walls, and development consent.

Contact Council by phoning 9839 6000.

ATTACHMENT A

EXTRACT FROM BLACKTOWN LOCAL ENVIRONMENTAL PLAN 1988

TABLE

ZONE No. 1 (a) (GENERAL RURAL ZONE)

1. Objectives of zone

The objectives are -

(a) to ensure that actual or potential agriculturally productive land is not withdrawn unnecessarily from production;

(b) to ensure that development in rural areas is carried out in a manner that minimises risks from natural hazards and does not unreasonably increase demand for public services;

(c) to provide for urban support functions; and

(d) to ensure that development within the rural zones does not hinder the proper and orderly development of any future urban lands.

2. Development that does not require consent

Nil.

3. Development which requires consent

Any purpose other than a purpose included in Item 2 or 4 of the matter relating to this zone.

4. Prohibited

Amusement centres, animal boarding establishments where dogs are kept; auction rooms; boarding houses; brothels; bulk stores; bulky goods retail establishments; caravan parks; child care centres; commercial premises; detached dual occupancies; exhibition homes; exhibition villages; hardware stores; hazardous industries; hazardous storage establishments; highway service centres; industries (other than rural industries or extractive industries); integrated housing; junk yards; manufactured home estates; medium density housing; methadone dispensaries; mineral sand mines; mines; mixed businesses; mortuaries; motels; motor showrooms; offensive industries; offensive storage establishments; plant and equipment hire establishments; professional offices; refreshment rooms; residential flat buildings; service centres; service stations; shops; storage yards; transport terminals; warehouses.

PART 3 - SPECIAL PROVISIONS

DIVISION 1 - Subdivision of Land

Subdivision generally

10. (1) A person shall not subdivide land to which this plan applies without the consent of the council.

(2) Land shall not be subdivided unless the boundaries of allotments so created correspond generally with the boundaries, if any, between zones as shown on the map.

(3) Notwithstanding the provisions of subclause (2), the council may consent to a plan of subdivision whereby the boundaries of allotments so created will not correspond with the boundaries between different zones as shown on the map but which, in the opinion of the council, depart from those boundaries only to a minor extent.

(4) Where, upon a registration of a plan of subdivision referred to in subclause (3), the boundary between land is determined in a different position from the boundary between different zones indicated on the map, land shall be deemed to be within the appropriate zone as determined by the council.

(5) The council shall not grant consent to the subdivision of any part of the land to which this plan applies unless the plan of subdivision makes provision for any proposed road on that part of the land shown by parallel broken lines on the map to be opened generally in the locations shown on the map.

Subdivision in rural zones

11. (1) The council may only consent to an application to subdivide land within Zone No. 1 (a) if each separate allotment created by the subdivision has an area of not less than 40 hectares.

(2) Land within Zone No. 1 (b) shall not be subdivided unless -

(a) the average area of all rural residential allotments created by the subdivision is not less than 2 hectares;

(b) the area of each rural residential allotment created by the subdivision is not less than 4000 square metres; and

(c) the subdivision will not result in there being more than 64 rural residential allotments within Zone No. 1 (b).

DIVISION 2 - Residential Development

Dwellings in rural zones

12. (1) In this clause -

"parcel", in relation to land, includes an area of adjoining or adjacent land held in the same ownership.

(2) Subject to subclauses (3)-(5), a dwelling shall not be erected on a parcel of land within Zone No. 1 (a) unless the parcel of land has an area of not less than 4000 square metres.

(3) Notwithstanding subclause (2), a dwelling shall not be erected on a parcel of land within Zone No. 1 (a) and marked "Clause 12(3)" on the map unless the parcel of land has an area of not less than 10 hectares.

(4) Notwithstanding subclause (2), a dwelling shall not be erected on a parcel of land within Zone No. 1 (a) and marked "Clause 12(4)" on the map unless the parcel of land has an area of not less than 2 hectares.

(5) Notwithstanding subclause (2), a dwelling may, with the consent of the council, be erected on each parcel of land within Zone No. 1 (a) and marked "Clause 12(5)" on the map.

(6) A dwelling shall not be erected on any land within Zone No.1(b) where that land is-

(a) within 100 metres of a road constructed to provide access to the extractive industry situated on lot 2, D.P. 262213, lots 9, 10, 11, 12 and 13, D.P. 241859, part lot 1, D.P. 109198, lot W, D.P. 419612, part lot 1, D.P. 400697, and lot 11, D.P. 558723, Minchinbury; or

(b) in the opinion of the council, significantly affected by noise.

Drainage

19. (1) Notwithstanding any other provision of this plan, a person shall not carry out development on land to which this plan applies unless the land is filled to a level satisfactory to the council.

(2) Where, in relation to the carrying out of development on land to which this plan applies, the council makes any requirements with respect to the drainage of land or the drainage of other land, a person shall not carry out that development except in accordance with those requirements.

Home activity

23. (1) The council shall not consent to the carrying out of development for the purposes of a home activity on land within Zone No. 1 (a), 1 (b), 2 (a), 2 (b) or 2 (c) except in accordance with subclause (2).

(2) The council may -

(a) in relation to land within Zone No. 1 (a) or 1 (b), consent to -

(i) the use of a building for the purpose of a home activity occupying a gross floor area of up to but not exceeding 100 square metres; and

(ii) the sale from the building of artefacts or produce manufactured or grown on the premises or on the land on which the building is erected; or

(b) in relation to land within Zone No. 2 (a), 2 (b) or 2 (c), consent to the use of a building for the purpose of a home activity occupying a gross floor area of up to but not exceeding 50 square metres where -

(i) public comment has been sought from persons who, in the opinion of the council, could reasonably be considered to be affected by that use; and

(ii) the council is satisfied that the granting of consent would not be contrary to the public interest.

Services

24. (1) The council may refuse consent to the carrying out of any development on any land within Zone No. 2 (a), 2 (b) or 2 (c) unless arrangements satisfactory to it are made (whether by the imposition of conditions under section 91 of the Act or otherwise) for the underground provision of an electrical system to that land and for the installation of such lamp standards as are approved by the council in relation to reticulation.

(2) The council may refuse consent to the carrying out of any development on any land within Zone No. 2 (a), 2 (b) or 2 (c) unless arrangements satisfactory to Telecom Australia are made by the owner of the land to which the development consent relates for the provision of underground telephone plant to that land.

(3) (Repealed)

(4) A person must not carry out development on any land to which this plan applies unless arrangements satisfactory to the Council have been made for the provision of sewerage services to that land.

(5) A person shall not carry out development on land shown edged heavy black on the map marked "Blacktown Local Environmental Plan 1988 (Amendment No. 10)" unless arrangements satisfactory to:

(a) the Council; or

(b) in the case of land within the Toongabbie Creek catchment as shown on the map marked "Drainage Catchments - Parklea Release Area", the Council,

have been made in relation to the drainage of that land.

(6) A person shall not carry out development on land shown edged heavy black on the map marked "Blacktown Local Environmental Plan 1988 (Amendment No. 10)" unless arrangements satisfactory to the Roads and Traffic Authority have been made by the developer with that Authority to make appropriate payment towards the cost of the arterial road network.

Tree preservation

25. (1) A person shall not ringbark, cut down, lop, top, remove, injure or wilfully destroy any tree, or cause any tree to be ringbarked, cut down, topped, lopped, removed, injured or wilfully destroyed; except with the consent of the council.

(2) In any proceedings for an offence arising under this clause, it shall be sufficient defence to prove that the tree ringbarked, cut down, topped, lopped, removed, injured or wilfully destroyed was dying or dead or had become dangerous.

(3) This clause does not apply to trees in a State forest or on land reserved as a timber reserve within the meaning of the Forestry Act 1916, or to trees required to be lopped in accordance with Regulation 38 or 39 of the Overhead Line Construction and Maintenance Regulations 1962, or to any trees which are under the control or management of the Water Board.

(4) This clause does not operate so as to require a consent to be given pursuant to this clause for the carrying out of development at a plant nursery if the development could lawfully be carried out at the plant nursery in the absence of this clause.

Covenants, agreements etc.

26. (1) For the purpose of enabling development to be carried out in accordance with this plan (as in force at the time the development is carried out) or in accordance with a consent granted under the Act, the operation of any covenant, agreement or instrument imposing restrictions on development, to the extent necessary to serve that purpose, shall not apply to the development.

(2) Nothing in the subclause (1) shall affect the rights or interests of the council under any registered instrument.

(3) Pursuant to section 28 of the Act, before the making of this plan, the Governor approved of subclauses (1) and (2).

Nuclear activities

30. Notwithstanding any other provision of this plan, a person shall not carry out development on land to which this plan applies for the purposes of -

(a) mining prohibited by the Uranium Mining and Nuclear Facilities (Prohibition) Act 1986;

(b) a nuclear facility, the construction or operation of which is prohibited under that Act; or

(c) a facility for the storage or disposal of radioactive waste material referred to in section 8(3)(b) of that Act, except pursuant to a licence under the Radioactive Substances Act 1957.

Zone RU4 Primary Production Small Lots

1 Objectives of zone

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To ensure that development does not prejudice the orderly and economic development of future urban land.
- To ensure that development is sympathetic with the ecological attributes of the area.

2 Permitted without consent

Home occupations

3 Permitted with consent

Agricultural produce industries; Agriculture; Cemeteries; Community facilities; Dwelling houses; Environmental facilities; Environmental protection works; Extensive agriculture; Farm buildings; Flood mitigation works; Heliports; Home businesses; Home industries; Intensive plant agriculture; Landscaping material supplies; Places of public worship; Plant nurseries; Recreation facilities (outdoor); Roads; Roadside stalls; Veterinary hospitals; Water reticulation systems.

4 Prohibited

Aquaculture; Intensive livestock agriculture; Any other development not specified in item 2 or 3.

Schedule 1 Exempt development

(Appendix 4, Clause 3.1)

Note 1. *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* specifies exempt development under that Policy. The Policy has State-wide application.
Note 2. Exempt development may be carried out without the need for development consent under the Act. Such development is not exempt from any approval, licence, permit or authority that is required under any other Act and adjoining owners' property rights and the common law still apply.

Advertisements, signs etc

(1) Advertisements and advertising structures:
- (a) Must not be moving signs.
- (b) If over a public road, must be least 3m above, and 600mm from the outside of, the carriageway of the road.
- (c) Must not exceed a maximum size of 1.2m long × 600mm high.
- (d) Must relate to the use of a building on the property on which it is displayed, unless it is in a business zone.
- (e) Must not be erected on a heritage item, unless the advertisement or structure replaces an existing sign (that was lawfully erected) with an advertisement or structure of the same or lesser size in the same location.

(2) Business identification signs in a residential zone:
- (a) Must be for a home office or a business or professional consulting room.
- (b) Only 1 sign is permitted per premises.
- (c) Must not exceed a maximum size of 1.2m in length × 600mm in height.
- (d) May display only:
  - (i) the name of the occupant, and
  - (ii) the address and phone number of the occupant, and
  - (iii) the type of business.
- (e) Must be located wholly within the boundaries of the property to which it relates.
- (f) Maximum height of a free-standing sign: 2m above ground level.
- (g) Must not be illuminated or flashing.

(3) Wall signs in an industrial zone:
- (a) Only 1 wall sign is permitted per premises.
- (b) Must relate to the use of the premises on which it is displayed.
- (c) Must be displayed on the facade of the premises to which it relates.
- (d) Must not exceed a maximum size of 2m × 1.2m.
- (e) Must not extend laterally beyond the wall of any building to which it is attached.
- (f) Must not project above the top of any wall to which it is attached.
- (g) Must not cover any window, door or architectural projection.
- (h) Must be securely fixed to the building to which it is attached.
- (i) Must not be flashing.

(4) Business identification signs in an industrial zone:
- (a) For single occupier buildings:
  - (i) only 1 sign is permitted per premises, and
  - (ii) must not exceed maximum size of 500mm × 1.5m, and
  - (iii) must not exceed a maximum height from ground level of 1.5m, and
  - (iv) must not project over a public place, and
  - (v) must be securely fixed to the building to which it is attached; and
  - (vi) must not be flashing.

Schedule 2 Complying development

(Appendix 4, Clause 3.2)

Note 1. *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* specifies complying development and the complying development conditions for that development under that Policy. The Policy has State-wide application.
Note 2. Information relevant to this Part is also contained in the Act, the *Environmental Planning and Assessment Regulation 2000*, the *Protection of the Environment Operations Act 1997* and the *Roads Act 1993*.

This schedule is blank on the making of this Precinct Plan.

Part 1 Types of development

Part 2 Complying development certificate conditions

Zone B5 Business Development

1 Objectives of zone

- To enable a mix of business and warehouse uses in locations that are close to, and that support the viability of, centres.
- To allow development that is compatible with the scale, form and character of existing buildings and the surrounding area.

2 Permitted without consent

Nil

3 Permitted with consent

Bulky goods premises; Business premises; Car parks; Child care centres; Community facilities; Earthworks; Educational establishments; Entertainment facilities; Function centres; Landscape and garden supplies; Passenger transport facilities; Places of public worship; Pubs; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Roads; Service stations; Signage; Storage premises; Vehicle sales or hire premises; Veterinary hospitals; Warehouse or distribution centres

4 Prohibited

Any development not specified in item 2 or 3.

Schedule 1 Additional permitted uses

(Clause 2.5)

1 Take away food and drink premises within Zone B5 Business Development

Land shown hatched on the Land Zoning Map—development for the purpose of take away food and drink premises.

Zone R2 Low Density Residential

1 Objectives of zone

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To allow people to carry out a reasonable range of activities from their homes, where such activities are not likely to adversely affect the living environment of neighbours.
- To support the well-being of the community, by enabling educational, recreational, community, religious and other activities where compatible with the amenity of a low density residential environment.

2 Permitted without consent

Home occupations

3 Permitted with consent

- Bed and breakfast accommodation; Business identification signs;
- Child care centres; Community facilities; Dual occupancies;
- Dwelling houses; Earthworks; Educational establishments;
- Environmental protection works; Exhibition homes; Exhibition
- villages; Group homes; Health consulting rooms; Home-based
- child care; Home businesses; Home industries; Neighbourhood
- shops; Places of public worship; Roads; Secondary dwellings;
- Semi-detached dwellings; Shop top housing; Swimming pools;
- Veterinary hospitals.

4 Prohibited

Any development not specified in item 2 or 3.

Zone SP2 Infrastructure

1 Objectives of zone

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

2 Permitted without consent

Nil

3 Permitted with consent

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Earthworks; Environmental protection works; Flood mitigation works; Recreation areas; Recreation facilities (outdoor); Roads; Water recycling facilities; Waterbodies (artificial)

4 Prohibited

Any development not specified in item 2 or 3

Zone E2 Environmental Conservation

1 Objectives of zone

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

2 Permitted without consent

Nil

3 Permitted with consent

Earthworks; Environmental facilities; Environmental protection works; Flood mitigation works; Information and education facilities; Kiosks; Recreation areas; Roads; Signage; Waterbodies (artificial)

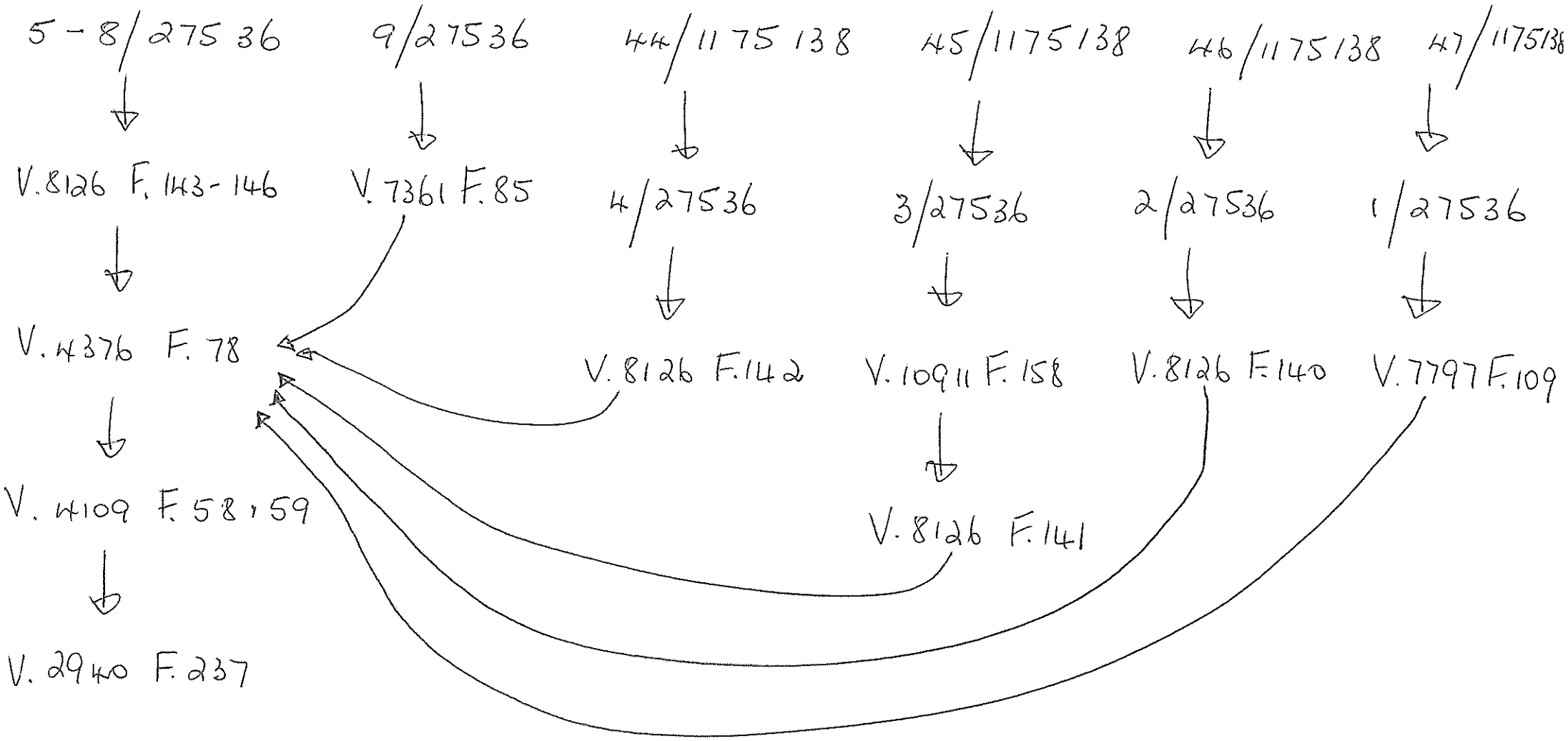
4 Prohibited

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Appendix D

Historical Title Search

Title Tree


5-8/27536
9/27536
44/1175138
45/1175138
46/1175138
47/1175138
V.8126 F.143-146
V.7361 F.85
4/27536
3/27536
2/27536
1/27536
V.4376 F.78
V.8126 F.142
V.10911 F.158
V.8126 F.140
V.7797 F.109
V.4109 F.58,59
V.8126 F.141
V.2940 F.237

~ Search ~

re Lots 5-9 in DP 27536.
Lots 44-47 in DP 1175138

Schedule of Registered Proprietors

V. 2940 F. 237	George Henry Cooper
issued	of Kelpie
29/5/1915	Gentleman
Tfr. A854956	Richard Archer Buxton
Reg 11/9/22	of Blacktown
(V2940 F.237)	Company Secretary
TA B610368	Annie Elizabeth Trangen
Reg 3/2/28	wife of Oth Abraham Trangen
(V2940 F.237)	of Suva Fiji, Gentleman
Tfr B610369	Annie Elizabeth Trangen &
12/1/28	Bessie Fothergill Simpson
(V2940 F.237)	of Blacktown, Widow
Tfr B934747	Bessie Fothergill Simpson
Reg 30/1/30	
(V4109 F.58)	

13/9/13

Jenners Title Searching Co.
ESTABLISHED 1949

~ Search ~

re Lots 5-9 in DP 27536 &
Lots 44-47 in DP 1175138

Schedule of Reg Proprietors Contd

TH D128304 James Simpson
Reg 4/8/42 of Blacktown Estate Agent &
(V4376 F.78 Marjorie Neish Simpson
of Bellingen, Spinster

13/9/13

Jenners Title Searching Co.
ESTABLISHED 1949

~ Search ~

re Lot 5 - 8 DP 27536

Schedule of Rega Proprietors Contd

Tfr J780810	Alan Leslie Canthean
Reg 7/10/64	of Cremorne
(V 8126 F 143)	Company Director
Tfr K126313	David Scheinberg
Reg 11/10/65	of Eagecliff
(V 8126 F 143)	Manager

13/9/13.

Jenners Title Searching Co.

ESTABLISHED 1949

~ Search ~

re Lot 9 in DP 27536

Schedule of Registered Proprietors Contd

Ef. G762519	Gordon Luke
Reg 19/9/57	of Schofields Farmer &
(V.4376 F.78)	Edith Margaret Luke his wife
Ef. T304506	Thomas Mc Namara &
Reg 9/11/86	Coralie Margaret Mc Namara
(V.7361 F.85)	
Ef. 8562714	Genetive Pty. Limited
Reg 3/5/2002	
(9/27536)	

25/9/13

Jenners Title Searching Co.

ESTABLISHED 1949

~ Search ~

Lot 444 in DP 1175138

Schedule of Regd Proprietors Conta

Tfr 4990335	Cecil Clyde Newton
Reg 8/3/62	of Forestville
(V.8126 F.142)	Farmer
Tfr J578382	John Percival Coulton
Reg 21/2/64	of Rooty Hill
(V.8126 F.142)	Compost Manufacturer
TA Y225543	Edwina Joye Montague
Reg 8/3/89	of Ola Bar
(4/27536)	
Tfr 3142889	Alexander Karl Dawtchenko
Reg 13/6/97	
(4/27536)	

25/9/13

Jenners Title Searching Co.

ESTABLISHED 1949

~ Search ~

re Lot 45 in DP 1175138

Schedule of Regd Proprietors Conta

Dlr H 715326	Clarence Peter Wenzel
Reg 12/12/60	of Blacktown, Carpenter &
(V 8126 F 141)	Evelyn Wenzel, his wife
ND K 436983	Clarence Peter Wenzel
Reg 8/9/66	
(V 8126 F 141)	
Dlr K 542567	Joseph Tarrugia of Pendle Hill Farmer
Reg 3/1/67	Anne Maria Tarrugia his wife
(V 8126 F 141)	Alfred Anthony Micallef of Pendle Hill Farmer
	Theresa Mary Micallef his wife
Dlr K 597859	Alfred Anthony Micallef
Reg 13/3/67	of Pendle Hill Farmer &
(V 8126 F 141)	Theresa Mary Micallef
Dlr L 205765	Joseph Tarrugia
Reg 15/10/68	of Marsden Park Dairy Contractor &
(V 8126 F 141)	Anne Marie Tarrugia, his wife

25/9/13

Jenners Title Searching Co.
ESTABLISHED 1949

~ Search ~

	re Lot 46 in DP 1175138
	Schedule of Regd Proprietors Contd.
Ltr TH489110	Gordon McClelland Simpson
Reg 5/1/65	of Blacktown, Electrical Engineer
(V.8126/F.140)	James Simpson of Blacktown Estate Agent
	Marjorie Neish Simpson
	of Bellingen, Spinster &
	Elizabeth Greenaway, wife of Alexander
	James Greenaway of Parramatta Co. Director
	Alfred Aston Simpson of Blacktown Clerk
	Leslie Grenfell Simpson of Blacktown
	Labourer
Ltr R996440	Gordon McClelland Simpson
Reg 11/8/80	James Simpson, Marjorie Neish
(V8126F.140)	Simpson, Elizabeth Greenaway
	Jean Simpson & Leslie Grenfell Simpson
Ltr TH018140	Gordon McClelland Simpson &
Reg 4/2/83	Lurline Ina Simpson
(V8126F.140)	
ND 3715965	Lurline Ina Simpson
Reg 8/1/98	DJ 25/9/13
(2/27536)	

~ Search ~

re Lot 46 on DP 1175138

Schedule of Regd Proprietors Contd

TA AE 97916	Peter Gordon Simpson
Reg 28/10/2009	Gillian Dianne Vidler &
(2/27536)	Wendy Elizabeth Simpson-Jones
TA AF 99789 2	Gillian Dianne Vidler
Reg 2/2/2011	Wendy Elizabeth Simpson-Jones
(2/27536)	Peter Gordon Simpson &
	Margaret Joan Simpson
Lpr AH856016	BP Australia Pty. Ltd.
Reg 8/7/2013	
(46/1175138)	

MJ 25/9/13.

Jenners Title Searching Co.
ESTABLISHED 1949

~ Search ~

re Lot 47 in DP 1175138

Schedule of Regd Proprietors Contd.

Lot H324261 Reg 10/11/59 (V4376 F.78)	Louis James McCoy of Blacktown, Policeman & Dorothy Gertrude McCoy, his wife
NO V577043 Reg 18/2/85 (V.7797 F.109)	Dorothy Gertrude McCoy
Lot V8467974 Reg 31/7/85 (V.7797 F109)	Dakaki Holdings Pty. Limited

25/9/13.

Jenners Title Searching Co.

ESTABLISHED 1949

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 5/27536

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:16 PM	-	-

VOL 8126 FOL 143 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 5 IN DEPOSITED PLAN 27536
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP27536

FIRST SCHEDULE

DAVID SCHEINBERG (T K126313)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 T753003 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 6/27536

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:16 PM	-	-

VOL 8126 FOL 144 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 6 IN DEPOSITED PLAN 27536
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP27536

FIRST SCHEDULE

DAVID SCHEINBERG (T K126313)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 T753003 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 7/27536

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:26 PM	-	-

VOL 8126 FOL 145 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 7 IN DEPOSITED PLAN 27536
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP27536

FIRST SCHEDULE

DAVID SCHEINBERG (T K126313)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 T753003 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 8/27536

SEARCH DATE	TIME	EDITION NO	DATE
13/9/2013	10:26 AM	-	-

VOL 8126 FOL 146 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 8 IN DEPOSITED PLAN 27536
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP27536

FIRST SCHEDULE

DAVID SCHEINBERG (T K126313)

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 T753003 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 13/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 9/27536

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:28 PM	6	8/4/2010

LAND

LOT 9 IN DEPOSITED PLAN 27536
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP27536

FIRST SCHEDULE

GENETIVE PTY LIMITED (T 8562714)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 G762519 COVENANT
3 AF419406 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 44/1175138

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:31 PM	-	-

CERTIFICATE OF TITLE HAS NOT ISSUED

LAND

LOT 44 IN DEPOSITED PLAN 1175138
AT COLEBEE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1175138

FIRST SCHEDULE

ALEXANDER KARL SAVTCHENKO

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
* 2 3142890 MORTGAGE TO ST. GEORGE BANK LIMITED

NOTATIONS

CERTIFICATE OF TITLE NOT ISSUED. LODGED DEALINGS MUST BE ACCOMPANIED BY PRIOR CERTIFICATE OF TITLE 4/27536 (EDITION 2)
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 45/1175138

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:32 PM	1	25/3/2013

LAND

LOT 45 IN DEPOSITED PLAN 1175138
AT COLEBEE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1175138

FIRST SCHEDULE

JOSEPH FARRUGIA
ANNE MARIE FARRUGIA
AS JOINT TENANTS

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 AE903226 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 46/1175138

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:33 PM	2	3/7/2013

LAND

LOT 46 IN DEPOSITED PLAN 1175138
AT COLEBEE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1175138

FIRST SCHEDULE

BP AUSTRALIA PTY LTD (T AH856016)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 47/1175138

SEARCH DATE	TIME	EDITION NO	DATE
25/9/2013	1:33 PM	-	-

CERTIFICATE OF TITLE HAS NOT ISSUED

LAND

LOT 47 IN DEPOSITED PLAN 1175138
AT COLEBEE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1175138

FIRST SCHEDULE

SAKAKI HOLDINGS PTY LIMITED

SECOND SCHEDULE (2 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
* 2 AH203502 MORTGAGE TO WESTPAC BANKING CORPORATION

NOTATIONS

CERTIFICATE OF TITLE NOT ISSUED. LODGED DEALINGS MUST BE ACCOMPANIED BY PRIOR CERTIFICATE OF TITLE 1/27536 (EDITION 6)
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
25/9/2013 1:28PM

FOLIO: 9/27536

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 7361 FOL 85

Recorded	Number	Type of Instrument	C.T. Issue
26/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
16/3/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
3/5/2002	8562714	TRANSFER	
3/5/2002	8562731	MORTGAGE	EDITION 1
15/9/2004	AA955523	CAVEAT	
17/2/2005	AB296888	WITHDRAWAL OF CAVEAT	
8/3/2005	AB336894	DISCHARGE OF MORTGAGE	
8/3/2005	AB336895	MORTGAGE	EDITION 2
12/4/2005	AB404811	MORTGAGE	EDITION 3
28/7/2005	AB657852	DISCHARGE OF MORTGAGE	EDITION 4
6/9/2007	AD400376	DISCHARGE OF MORTGAGE	
6/9/2007	AD400377	MORTGAGE	EDITION 5
8/4/2010	AF419405	DISCHARGE OF MORTGAGE	
8/4/2010	AF419406	MORTGAGE	EDITION 6

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
25/9/2013 1:34PM

FOLIO: 4/27536

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8126 FOL 142

Recorded	Number	Type of Instrument	C.T. Issue
29/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
15/12/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
8/3/1989	Y225543	TRANSMISSION APPLICATION	EDITION 1
3/11/1992	E869671	CAVEAT	
23/10/1995	0629158	WITHDRAWAL OF CAVEAT	
13/6/1997	3142889	TRANSFER	
13/6/1997	3142890	MORTGAGE	EDITION 2
19/7/2006	AC468396	CAVEAT	
6/11/2006	AC723209	WITHDRAWAL OF CAVEAT	
12/4/2007	AD45970	CAVEAT	
23/4/2010	AF450134	WITHDRAWAL OF CAVEAT	
17/5/2012	DP1175138	DEPOSITED PLAN	
20/8/2012	AH97650	REQUEST	
31/10/2012	AH333049	DEPARTMENTAL DEALING	
28/11/2012	AH301681	REQUEST	FOLIO CANCELLED

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

Form: 97-011
Licence: AUS/0634/96

(1)

TRANSFER

New South Wales
Real Property Act 1900

3142889 Y

Instructions for filling out this form are available from the Land Titles Office

Office of State Revenue use only

040697 2809 04 40200234/03 $2.00
N.S.W. STAMP DUTY

(A) **LAND TRANSFERRED**
If appropriate, specify the share or part transferred.

CERTIFICATE OF TITLE 4/27536

(B) **LODGED BY**

LTO Box	Name, Address or DX and Telephone
1133X	Combined Legal Reference (15 character maximum): Hayes - Savtchenko

(C) **TRANSFEROR** EDWINA JAYE MONTAGUE

(D) acknowledges receipt of the consideration of $220,000.00
and as regards the land specified above transfers to the transferee an estate in fee simple.

(E) Encumbrances (if applicable): 1. .... 2. .... 3. ....

(F) **TRANSFEREE**

T
TS (s713 LGA)
TW (Sheriff)

ALEXANDER KARL SAVTCHENKO

(G) ~~TENANCY.~~

(H) We certify this dealing correct for the purposes of the Real Property Act 1900. **DATE** PLS DO NOT DATE

Signed in my presence by the transferor who is personally known to me.

Signature of Witness

ROBYN DILWORTH
Name of Witness (BLOCK LETTERS)

4 QUOLL PLACE, BOHNOCK VIA TAREE 2430
Address of Witness

Signature of Transferor

Signed in my presence by the transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Signature of Transferee
Solicitor for DAVID, A HAYES
If signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name in block letters.

Checked by (LTO use) ....

[redacted] RTIFICATE OF TITLE

NEW SOUTH WALES [redacted] OPERTY ACT, 1900, as amended.

Application No. 20958.
Prior Title Volume 8126 Folio 141

Vol. 10911 Fol. 158

ID Edition issued 24-10-1968.

L205765

(Page 1) Vol. 10911 Fol. 158

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

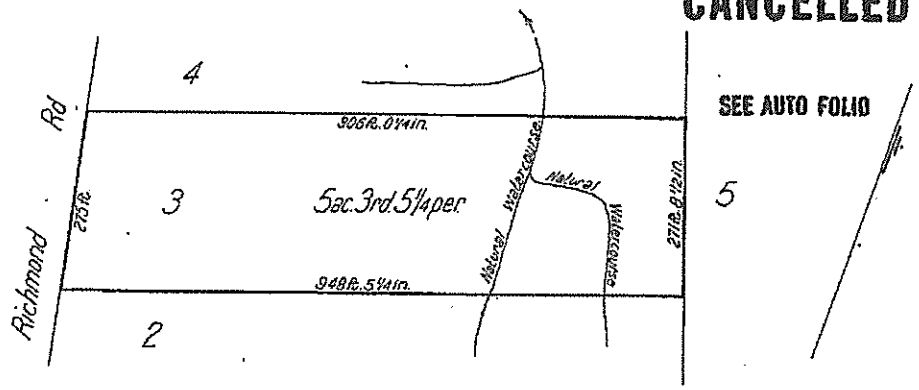
Witness R B Latta

Registrar General.

CANCELLED

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND



L205765 Rd

Scale: 200 feet to one inch

ESTATE AND LAND REFERRED TO

S Estate in Fee Simple in Lot 3 in Deposited Plan 27536 in the Municipality of Blacktown Parish of Gidley and County of Cumberland being part of Portion 24 granted to Richard Alcorn on 31-8-1819.

FIRST SCHEDULE

JOSEPH FARRUGIA, of Marsden Park, Sub-Contractor, and ANNE MARIE FARRUGIA, his wife, as Joint Tenants.

SECOND SCHEDULE

GRY 1. Reservations and conditions, if any, contained in the Crown Grant above referred to.

Registrar General

Vol. 10911 Fol 158

.17 V.C.N. Blight, Government Printer

L205766 M220021 R199910 M R158960 M/K

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar-General
CANCELLED SEE AUTO FOLIO					

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar-General	CANCELLATION		
~~Mortgage~~	~~L205766~~	~~27-9-1968~~	~~to Angelo Borg and Paul Hayward both of Gunnedah Motor Body Builders as tenants in common in equal shares~~	~~27-10-1968~~		Discharged	M220021	
~~Mortgage~~	~~R199910~~		~~to Commonwealth Trading Bank of Australia~~	~~19-5-1977~~		Discharged	R158960	
Mortgage	R158961 P	———	to Australia and New Zealand Banking Group Limited.	2-4-1979				

(Page 2 of 2 pages)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR-GENERAL ARE CANCELLED

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
25/9/2013 1:38PM

FOLIO: 46/1175138

First Title(s): OLD SYSTEM
Prior Title(s): 2/27536

Recorded	Number	Type of Instrument	C.T. Issue
17/5/2012	DP1175138	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
14/1/2013	AH381037	TRANSFER	FOLIO CREATED EDITION 1
3/7/2013	AH856016	TRANSFER	EDITION 2

*** END OF SEARCH ***

DLA-Marsden Park

PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
25/9/2013 1:35PM

FOLIO: 2/27536

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8126 FOL 140

Recorded	Number	Type of Instrument	C.T. Issue
29/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
15/12/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
8/7/1993	I470659	LEASE	EDITION 1
8/1/1998	3715965	NOTICE OF DEATH	EDITION 2
13/11/1998	5394323	LEASE	EDITION 3
7/8/2007	AD320777	LEASE	EDITION 4
20/8/2008	AE160793	TRANSFER OF LEASE	EDITION 5
28/10/2009	AE979161	TRANSMISSION APPLICATION	EDITION 6
1/12/2009	AF154371	REQUEST	EDITION 7
19/5/2010	AF461298	LEASE	EDITION 8
2/2/2011	AF997892	TRANSMISSION APPLICATION	EDITION 9
17/5/2012	DP1175138	DEPOSITED PLAN	
20/8/2012	AH97650	REQUEST	
14/1/2013	AH381037	TRANSFER	FOLIO CANCELLED

*** END OF SEARCH ***

DLA-Marsden Park

PRINTED ON 25/9/2013

**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

Form: 03TA
Licence: 01-05-051
Licensee: LEAP Legal Software Pty Limited
Firm name: Grahams Solicitors

TRANSMISSION APPLICATION

New South Wales
Section 93 Real Property Act 1900

AE979161K

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY — Office of State Revenue use only

Office of State Revenue
NSW Treasury
Client No: 1398012 281
Duty: $50.00 Trans No: 5567865

(A) LAND — Torrens Title
266/14740 and 2/27536
NOW BEING 1/135873

(B) REGISTERED DEALING — Number | Torrens Title

(C) LODGED BY — Delivery Box: 659M

Name, Address or DX and Telephone:
SCOTT ASHWOOD PTY LTD
GPO BOX 4103 SYDNEY 2001
TEL: (02) 9232 4122 LLPN: 123482P
Reference (optional): GRL: 90274

CODE: TA

(D) DECEASED REGISTERED PROPRIETOR
LURLINE INA SIMPSON

(E) APPLICANT
PETER GORDON SIMPSON, JILLIAN DIANNE VIDLER AND WENDY ELIZABETH SIMPSON - JONES
as Joint Tenants

OFFICE OF STATE REVENUE (N.S.W. TREASURY) 1398012 281 ALTERATION NOTED

The applicant, being entitled as Executors of the will of the deceased registered proprietor (who died on 23 June 2009) pursuant to probate No. 114697 of 2009 granted on 7 September 2009 to Peter Gordon Simpson, Jillian Dianne Vidler and Wendy Elizabeth Simpson - Jones (a certified copy of which is lodged herewith) applies to be registered as proprietor of the estate or interest of the deceased registered proprietor in the abovementioned land.

DATE 10/09/09

(G) I certify that the person(s) signing opposite, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Signature of witness:
Name of witness: PHILLIP SIMMONS
Address of witness: 33 FLORIBUNDA AVE GLENMORE PARK NSW 2745

Certified correct for the purposes of the Real Property Act 1900 by the Applicant.

Signature of Applicant: Y
Peter Gordon SIMPSON

(H) CONSENT OF EXECUTOR, ADMINISTRATOR OR TRUSTEE

I,

executor/executrix of the will of the deceased registered proprietor, hereby consent to this application.

Signature of witness:
Name of witness: PHILLIP SIMMONS
Address of witness: 33 FLORIBUNDA AVE GLENMORE PARK 2745

Signature of executor/executrix of the will:
PGSimpson
JDVidler
WESimpson-Jones

PHILLIP SIMMONS 33 FLORIBUNDA AVE GLENMORE PARK 2745

All handwriting must be in block capitals.

Witness for WE Simpson-Jones
W. Simpson-Jones
KARIN ELAINE BAILEY

Office use only—
Evidence sighted/sighted and returned:

Name & Address: K.E.Bailey 911 Richmond Office Lake Cathie 2445

NOW BEING 1/135873 (RESIDUE AFTER ROAD) NSW 28/10

Form: 03TA
Licence: 01-05-051
Licensee: LEAP Legal Software Pty Limited
Firm name: Grahams Solicitors

TRANSMISSION APPLICATION

New South Wales
Section 93 Real Property Act 1900

AF997892Q

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY — Office of State Revenue use only

(A) LAND — Torrens Title: 1/135873 & 2/27536

(B) REGISTERED DEALING — Number: | Torrens Title:

(C) LODGED BY — Delivery Box: 256 | Name, Address or DX and Telephone: 1230021 | Reference (optional): | CODE: TA

(D) DECEASED REGISTERED PROPRIETOR — LURLINE INA SIMPSON

(E) APPLICANT — JILLIAN DIANNE VIDLER AS TO A ONE-THIRD SHARE, WENDY ELIZABETH SIMPSON-JONES AS TO A ONE-THIRD SHARE, PETER GORDON SIMPSON AS TO A ONE-SIXTH SHARE, MARGARET ~~JONES~~ JOAN SIMPSON AS TO A ONE-SIXTH SHARE as tenants in common in unequal share

(F) The applicant, being entitled as Beneficiaries of the estate of the deceased registered proprietor (who died on 23 June 2009) pursuant to probate No. 114697 of 2009 granted on 7 SEPTEMBER 2009 to Peter Gordon Simpson, Jillian Dianne Simpson and Wendy Elizabeth Simpson-Jones (a certified copy of which is lodged herewith) applies to be registered as proprietor of the estate or interest of the deceased registered proprietor in the abovementioned land.

DATE 30/4/2010

(G) I certify that the person(s) signing opposite, with whom I am personally acquainted or as to whose identity I am otherwise satisfied, signed this instrument in my presence.

Certified correct for the purposes of the Real Property Act 1900 by the Applicant.

Signature of witness:

Signature of Applicant:

Name of witness: JENNY LINDA MARSHALL (B.BUS)
Address of witness: 238 QUILTA RD. ROUSE HILL 2480
JP # 181330

RELODGED
20 JAN 2011
TIME: 10.32

(H) CONSENT OF EXECUTOR, ADMINISTRATOR OR TRUSTEE

I, Peter Gordon Simpson, Jillian Dianne Vidler and Wendy Elizabeth Simpson-Jones executor/executrix of the will of the deceased registered proprietor, hereby consent to this application.

Signature of witness:

Name of witness: Coleen Holmes
Address of witness: 3 Lae Pl
Whalan. NSW.

Signature of executor/executrix of the will:

W. Simpson-Jones
Vidler

All handwriting must be in block capitals.
Office use only—
Evidence sighted/sighted and returned:

Form: 011
Licence: 05-11-638
Licensee: Softdocs
Coleman & Greig

(1)

TRANSFER

New South Wales
Real Property Act 1900

AH381037T

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the R(by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY Office of State Revenue use only

NEW SOUTH WALES DUTY
12-10-2012 0006840250-001
SECTION 308-TRANSFER
NO DUTY PAYABLE

OFFICE OF STATE REVENUE (NSW) 3726 TERRITION NOTED

(A) **TORRENS TITLE** 1175138
LOT 55 DP ~~27530~~ PART 2/27536

(B) **LODGED BY**

Document Collection Box	Name, Address or DX, Telephone, and Customer Account Number if any	CODES
545D	LLPN: 123397E JOHN McLAREN & CO Reference (optional): COLEMAN: RMS	T TW

OFFICE OF STATE REVENUE (NSW) 3726 TERRITION NOTED

(C) **TRANSFEROR** JILLIAN ~~DIANNE~~ VIDLER, WENDY ELIZABETH SIMPSON-JONES, PETER GORDON SIMPSON and MARGARET JOAN SIMPSON

(D) **CONSIDERATION** The transferor acknowledges receipt of the consideration of $ 83,000.00 and as regards the land

(E) **ESTATE** specified above transfers to the transferee an estate in fee simple.

(F) **SHARE TRANSFERRED**

(G) Encumbrances (if applicable):

(H) **TRANSFEREE** ROADS AND MARITIME SERVICES ABN 76 236 371 088

(I) **TENANCY:**

DATE ...../...../.....

(J) I certify I am an eligible witness and that the transferor signed this dealing in my presence. [See note* below]

Signature of witness:

Name of witness:
Address of witness:

Certified correct for the purposes of the Real Property Act 1900 by the transferor.

Refer Annexure "A" for execution of Transferors

Signature of transferor:

Certified correct for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Signatory's name: John Cotter
Capacity: Solicitor for the transferee

CT PROD BY 285D ON 8/11/12

OFF L AF461298

(K) The transferee's solicitor certifies that the eNOS data relevant to this dealing has been submitted and stored under eNOS ID No. [ ] Full Name: ..... Signature: .....

** s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.*

~ Search ~

re Lot 60 in DP 1181670

Title Tree

60 / 1181670

↓

1 / 88530

↓

V. 6865 F. 196

↓

R.P.A. 38530

13/9/13

Jenners Title Searching Co.

ESTABLISHED 1949

~ Search ~

re Lot 60 in DP 1181670

Schedule of Registered Proprietors

V 6865 F 196	Karl Kramer
RPA 38530	of Burragorang Valley
Gaz. 29/9/54	Guest House Proprietor
Lr G305448	The Wellins Mill of Australia
Reg 16/6/55	Limited
V 6865 F 196	
Lr J876860	Robert Lyon
Reg 27/1/65	of Balmain
V 6865 F 196	Physiotherapist
Lr L6x8671	C. A. N. S. Pty. Limited &
Reg 25/11/69	Baker Thodel Company Pty.
V 6865 F 196	Limited

13/9/13

Jenners Title Searching Co.

ESTABLISHED 1949

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 60/1181670

SEARCH DATE	TIME	EDITION NO	DATE
13/9/2013	10:30 AM	1	9/7/2013

LAND

LOT 60 IN DEPOSITED PLAN 1181670
AT COLEBEE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF GIDLEY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1181670

FIRST SCHEDULE

C.A.N.S. PTY. LIMITED
BAKER SHOVEL CO PTY. LIMITED
AS TENANTS IN COMMON IN EQUAL SHARES

SECOND SCHEDULE (7 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
* 2 AH104136 CAVEAT BY SITEWORK SOLUTIONS PTY LIMITED
* AH142949 CAVEATOR CONSENTED
* AH142950 CAVEATOR CONSENTED
* AH142951 CAVEATOR CONSENTED
* AH142955 CAVEATOR CONSENTED
* AH142952 CAVEATOR CONSENTED
3 AH142950 EASEMENT FOR BATTER 15 METRE(S) WIDE AFFECTING THE SITE DESIGNATED (A) IN PLAN WITH AH142950
4 AH142951 EASEMENT FOR BATTER 15 METRE(S) WIDE AFFECTING THE SITE DESIGNATED (A) IN PLAN WITH AH142951
5 AH142955 MORTGAGE TO DOUGLAS HENRY BAKER
6 AH142952 EASEMENT FOR BATTER 15 METRE(S) WIDE AFFECTING THE PART DESIGNATED (A) IN PLAN WITH AH142952
* 7 AH543000 CAVEAT BY HEARTBREAK RIDGE PAINTBALL PTY LIMITED EXCLUDING THE PARTS DESIGNATED (A) IN PLANS WITH AH142950, AH142951 AND AH142952.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

DLA-Marsden Park PRINTED ON 13/9/2013

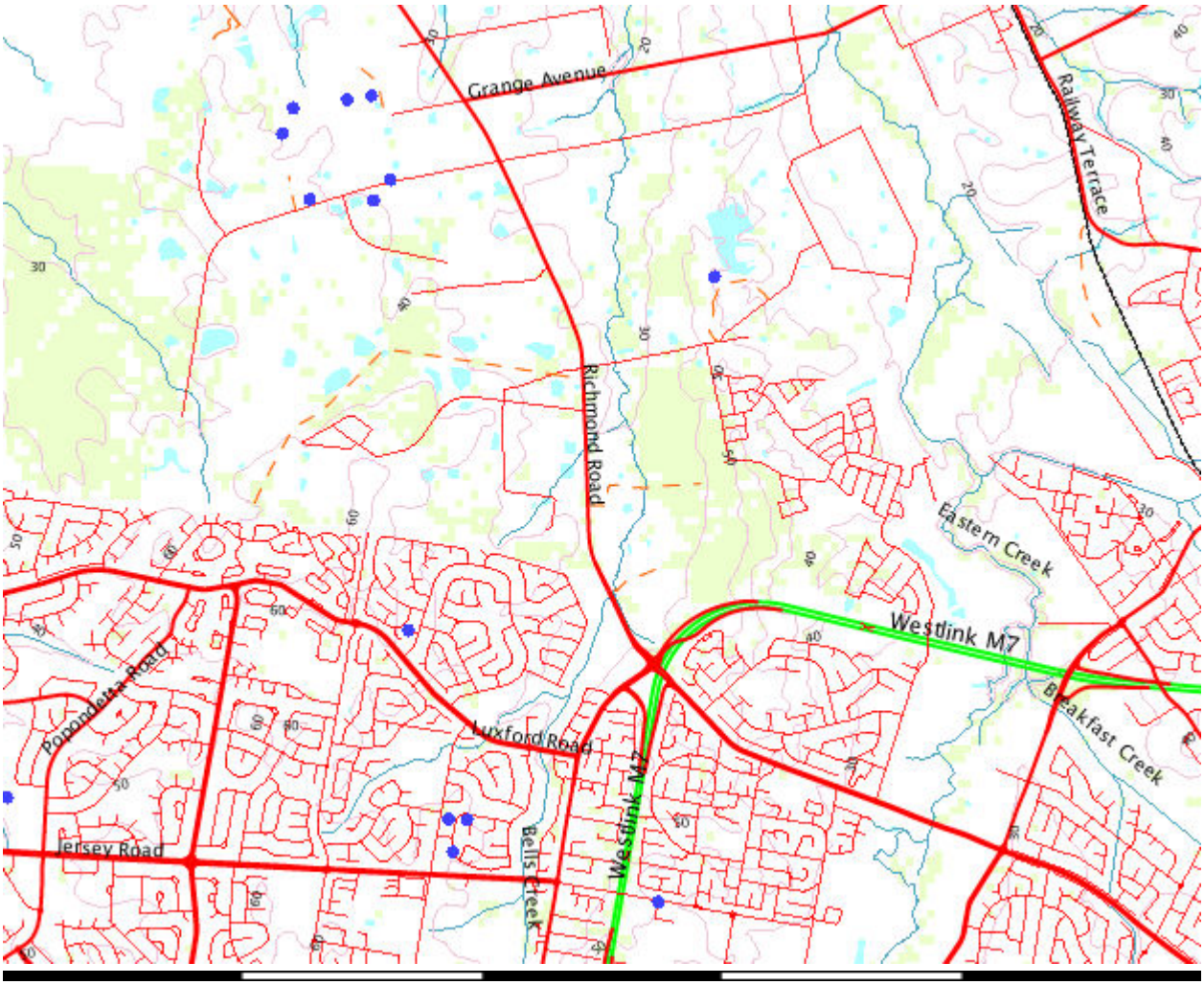
**ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.*

Appendix E

Groundwater Works Database Search

Townson Road Groundwater

Map created with NSW Natural Resource Atlas - http://www.nratlas.nsw.gov.au
Wednesday, September 11, 2013



0 6 Km

Legend

Symbol	Layer	Custodian
	Cities and large towns renderImage: Cannot build image from features	
Cowra	Populated places renderImage: Cannot build image from features	
	Towns	
	Groundwater Bores	
	Catchment Management Authority boundaries	
	Major rivers	
	Topographic base map	

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Wednesday, September 11, 2013

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW110684

Works Details (top)

GROUNDWATER NUMBER	GW110684
LIC-NUM	10BL603217
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	Auger - Solid Flight
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2009-08-26
FINAL-DEPTH (metres)	4.30
DRILLED-DEPTH (metres)	4.30
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	WOOLWORTHS PETROL DIVISION
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	2.80
SALINITY	
YIELD	

Site Details (top)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6264079.00
EASTING	299645.00
LATITUDE	33 44' 40"
LONGITUDE	150 50' 14"

GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	2//841205

Licensed (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	2 841205

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	4.30	150			Auger - Solid Flight
1	1	Casing	PVC Class 18	0.00	2.30	60			Other; Cap
1	1	Opening	Screen	2.30	4.30	60			PVC Class 18; A: .5mm; Screwed
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded; GS: 2-4mm
1		Annulus	Concrete	0.00	1.10	150			

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
3.40	4.30	0.90		2.80					

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.15	0.15	CONCRETE		
0.15	0.35	0.20	FILL		
0.35	3.80	3.45	CLAY		
3.80	4.30	0.50	SHALE WEATHERED		

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Wednesday, September 11, 2013

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW110658

Works Details (top)

GROUNDWATER NUMBER	GW110658
LIC-NUM	10BL603241
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Well
WORK-STATUS	
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2009-09-23
FINAL-DEPTH (metres)	10.00
DRILLED-DEPTH (metres)	10.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	RAJ
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6265375.00
EASTING	299280.00
LATITUDE	33 43' 58"
LONGITUDE	150 50' 0"

GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	110//830917

Licensed (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	110 830917

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	10.00	150			
1	1	Casing	P.V.C.	0.00	2.00	60			Seated on Bottom
1	1	Opening	Screen	2.00	10.00	60			PVC; A: .5mm
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded; GS: 2-4mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
8.20	10.00	1.80							

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.40	0.40	FILL		
0.40	5.00	4.60	CLAY WHITE RED		

5.00	7.50	2.50	CLAY ORANGE HARD DRY
7.50	8.20	0.70	CLAY MOIST GREY SANDY
8.20	10.00	1.80	SHALE WEATHERED

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW104311

Works Details (top)

GROUNDWATER NUMBER	GW104311
LIC-NUM	10BL160669
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	1996-02-07
FINAL-DEPTH (metres)	17.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6268327.00
EASTING	299016.00
LATITUDE	33 42' 22"
LONGITUDE	150 49' 53"

GS-MAP	
AMG-ZONE	56
COORD-SOURCE	Map Interpretation
REMARK	

Form-A (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	LT 3 DP 571348

Licensed (top)

COUNTY	CUMBERLAND
PARISH	ROOTY HILL
PORTION-LOT-DP	3 571348

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	17.00	135			
1	1	Casing	P.V.C.	0.00	0.00	50			

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Wednesday, September 11, 2013

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW103958

Works Details (top)

GROUNDWATER NUMBER	GW103958
LIC-NUM	10BL156671
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Rotary
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1992-02-03
FINAL-DEPTH (metres)	20.00
DRILLED-DEPTH (metres)	20.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	CAMIDE
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	10 - SYDNEY SOUTH COAST
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6267841.00
EASTING	300989.00
LATITUDE	33 42' 39"
LONGITUDE	150 51' 9"

GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	CUMBERLAND
PARISH	GIDLEY
PORTION-LOT-DP	3//232574

Licensed (top)

COUNTY	CUMBERLAND
PARISH	GIDLEY
PORTION-LOT-DP	3 232574

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	20.00	100			Rotary Air
1	1	Casing	P.V.C.	-0.30	20.00	50			C: 0-16m
1	1	Opening	Screen	17.00	20.00	50			

Water Bearing Zones (top)

no details

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	3.00	3.00	SILTY CLAY		
3.00	4.80	1.80	CLAYEY SAND		
4.80	5.90	1.10	SILTY CALY		
5.90	7.30	1.40	SILTSTONE		
7.30	16.50	9.20	SILTSTONE:DARK GREY		
16.50	20.00	3.50	SILTSTONE:GREY BROWN		

Appendix F

Dangerous Goods Search