



Douglas Partners
Geotechnics | Environment | Groundwater

Report on
Preliminary Site Investigation for Contamination
with Soil Sampling

Proposed Residential Care Facility
14 - 20 Eldridge Road
Bankstown

Prepared for
Hansen Yuncken Pty Ltd

Project 72087.03.R.001
August 2015

Integrated Practical Solutions



Document History

Document details

Project No.	72087.03	Document No.	72087.03.R.001
Document title	Preliminary Site Investigation for Contamination with Soil Sampling		
Site address	14 – 20 Eldridge Road, Bankstown		
Report prepared for	Hansen Yuncken Pty Ltd		
File name	P:\72087.03 - Bankstown, PSI and Waste Classification\8.0 Documents\8.2 Out\72087.03.R.001.Rev0.doc		

Document status and review

Revision	Prepared by	Reviewed by	Date issued
0	David Walker	Tim Wright	12 August 2015

Distribution of copies

Revision	Electronic	Paper	Issued to
0	1	0	Hansen Yuncken Pty Ltd

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

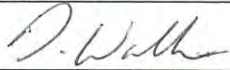
	Signature	Date
Author		12 August 2015
Reviewer		12 August 2015

Table of Contents

	Page
1. Introduction.....	1
2. Scope of Works.....	1
3. Site Identification and Description.....	2
3.1 Site Identification.....	2
3.2 Site Description.....	3
4. Topography, Geology, and Hydrogeology	3
4.1 Mapped Information	3
4.2 Previous Geotechnical Investigations.....	4
5. Site History	5
5.1 Historical Aerial Photographs	5
5.2 Historical Title Deeds	6
5.3 Regulatory Notices Search	9
5.4 Section 149 Certificates	9
5.5 WorkCover Records.....	9
5.6 Council Records.....	10
6. Potential Contamination Sources and Preliminary Conceptual Site Model	10
6.1 Potential Contamination Sources	10
6.2 Potential Receptors.....	10
6.3 Potential Pathways	11
6.4 Preliminary Conceptual Site Model.....	11
7. Fieldwork, Analysis and QA/QC.....	12
7.1 Sample Location and Rationale.....	12
7.2 Soil Sampling Methods	13
7.3 Analytical Scheme and Rationale	13
7.4 Quality Assurance and Quality Control.....	14
8. Site Assessment Criteria.....	14
8.1 Soils.....	15
8.1.1 Health Investigation and Screening Levels.....	15
8.1.2 Ecological Investigation Levels and Screening Levels	18
8.1.3 Management Limits – Petroleum Hydrocarbons.....	20
8.1.4 Asbestos in Soil.....	21
9. Field and Analytical Results	21

9.1	Field Observations	21
9.2	Field Testing Results	22
9.3	Laboratory Results	22
10.	Discussion	25
10.1	Site History	25
10.2	Contaminants in Soil (including Stockpile)	25
10.3	Preliminary Waste Classification	26
10.3.1	Filling and Stockpile	26
10.3.2	Natural Soil and Rock	26
10.4	Recommendations	27
11.	Conclusion	28
12.	Limitations	28

Appendix A:	Drawing 1
Appendix B:	Site Photographs
Appendix C:	Results of Groundwater Bore Search
Appendix D:	Historical Aerial Photographs
Appendix E:	Historical Title Deeds Search Results
Appendix F:	Section 149 Certificates
Appendix G:	Dangerous Goods Licences Search Result
Appendix H:	Test Pit Logs & Test Bore Logs
Appendix I:	Laboratory Certificates and Chain of Custody
Appendix J:	QA/QC Procedures and Results

Preliminary Site Investigation for Contamination with Soil Sampling Proposed Residential Care Facility 14 – 20 Eldridge Road, Bankstown

1. Introduction

This report details the methodology and results of a preliminary site investigation for contamination with soil sampling (PSI) undertaken by Douglas Partners Pty Ltd (DP) at 14 – 20 Eldridge Road, Bankstown. The PSI was commissioned by Hansen Yuncken Pty Ltd for the proposed Residential Care Facility (for aged care) development.

Based on the conceptual layout plans provided (dated 2 June 2015), the proposed development is for one basement level for car parking and back of house facilities, and four levels for bedrooms and associated care and shared facilities. The basement will cover most of the site, as will the building footprint.

The objectives of the PSI were to:

- Obtain historical information for the site;
- Identify potential sources of contamination and determine the contaminants of concern;
- Identify potential human and ecological receptors;
- Identify potentially affected media;
- Investigate the site for on-site soil contamination; and
- Provide an opinion on the suitability of the site for the proposed development.

The assessment included a review of available site history, a site walkover, development of a conceptual site model, collection of soil samples from test pits and a stockpile and analysis of selected samples for various contaminants. In addition, results of the investigation have been used to provide a preliminary *in situ* waste classification of filling and soil.

2. Scope of Works

The scope of works for the PSI was as follows:

- Review of readily available site history information comprising:
 - Historical aerial photographs;
 - Historical title deeds;
 - Public databases held under the *Contaminated Land Management Act 1997* and the *Protection of the Environment Operations Act 1997*;
 - Council's Section 149 (2&5) certificates;

- WorkCover records for dangerous goods licences; and
- Council Records form an informal Access to Information request.
- Review of other site information, comprising:
 - Geological and topographical maps/drawings;
 - Groundwater bores registered with the NSW Office of Water;
 - DP's previous geotechnical investigation reports; and
 - Conceptual layout plans for the proposed development provided by the client.
- Undertake a site walkover to observe for signs of potential contamination or possible sources of contamination;
- Excavate twelve test pits across the site using an excavator for the collection of soil samples;
- Excavate into a stockpile for the collection of soil samples;
- Screen all soil samples collected with a photo-ionisation detector (PID) to detect the presence or absence of volatile organic compounds;
- Conduct laboratory analysis on soil samples (including replicate QA/QC samples) at NATA accredited laboratories for combinations of the following common potential contaminants and soil characteristics:
 - Metals – arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc;
 - Total recoverable hydrocarbons (TRH);
 - Benzene, toluene, ethylbenzene and xylene (BTEX);
 - Polycyclic aromatic hydrocarbons (PAH);
 - Organochlorine pesticides (OCP);
 - Polychlorinated biphenyls (PCB);
 - Total phenols;
 - Asbestos;
 - Clay content, cation exchange capacity (CEC);
 - pH; and
 - Toxicity characteristic leaching procedure (TCLP) for lead and PAH.
- Provision of this PSI report detailing the findings of the assessment and commenting on the need for further investigation or remediation. The report includes a preliminary *in situ* waste classification.

3. Site Identification and Description

3.1 Site Identification

The site comprises three neighbouring land parcels at Bankstown, NSW, comprising:

- Lot 1 in Deposited Plan 374220 with street address of 20 Eldridge Road;
- Lot 1 in Deposited Plan 374219 with street address of 16 Eldridge Road; and
- Strata Plan 20206 with street address of 14 Eldridge Road.

The site covers an area of approximately 4,375 m².

A site plan and locality map are included as Drawing 1, Appendix A.

3.2 Site Description

A site walkover was undertaken by a DP environmental engineer on 22 July 2015. Observations are described below.

The site is currently absent of structures apart from a substation at the north of the site (Photograph 1, Appendix B) and a small, relatively new, brick structure at the north-east corner. Much of the site is unsealed, particularly in areas of previous building footprints. Asphalt is present in areas surrounding previous building footprints.

An old sign for the Bankstown Day Surgery & Specialist Centre is present at north-eastern part of the site. The footprint of this previous medical centre is at the east of the site and is covered in a sandy soil (filling) with fragments of building rubble such as bricks, tiles and concrete pieces (Photographs 2 and 3, Appendix B). One fragment of fibre-cement was observed on this filling and was collected as a sample (A1). A stockpile of soil, approximately 25 m³ in volume, was observed at the northern part of the building footprint (Photograph 4, Appendix B).

The north western part of the site is grassed and has sparse vegetation (Photograph 5, Appendix B). Remnants of buildings at this part of the site, such as exposed terracotta pipes, were observed on the ground surface. Small stockpiles of waste bricks, concrete rubble and timber were observed at the south-western part of the site (Photograph 6, Appendix B).

Although the entire site is fenced, there is evidence of fly tipping near the site boundary. In particular, a pile of waste materials such as glass, fabric, mattresses, garden waste, metal, timber, buckets and fibre cement sheeting was present at the south-east corner of the site, near the laneway (Photograph 7, Appendix B).

Surrounding properties were observed to be used for residential purposes (including up-gradient from the site), apart for some commercial (mostly retail and food outlets) to the east and south.

4. Topography, Geology, and Hydrogeology

4.1 Mapped Information

The Sydney 1:100,000 Geology Sheet indicates that the site is underlain Ashfield Shale which comprises black to dark-grey shale and laminite. The Sydney 1:100,000 Soils Landscape Sheet indicates that natural soils are formed by the “residual” soil process.

Acid Sulphate Soil Risk Mapping data (1994-1998) supplied by the NSW Department of Environment and Climate Change does not identify the site to be within an area, or close to an area, of an identified risk for acid sulphate soils.

A search of the NSW Office of Water database for registered groundwater bores did not reveal groundwater bores within a 500 m radius of the site. The search result is shown in Appendix C.

The land surrounding the site generally slopes down to the east. The ground surface at the site slopes down to the east from approximately RL 20.9 m to 18.3 m relative to Australian height Datum (AHD). Rainfall at the site is expected to infiltrate unsealed surfaces as well as enter the local stormwater system. Groundwater is expected to flow to the east and migrate towards Salt Pan Creek, located approximately 1 km to the east of the site and is the closest surface water body.

4.2 Previous Geotechnical Investigations

DP has conducted geotechnical investigations at the site and the following reports were produced:

- *Geotechnical Desk Top Study, 14 – 22 Eldridge Road, Bankstown*, 19 October 2010 (72087.00);
- *Report on Geotechnical Investigation, Proposed Medical Centre, 14-20 Eldridge Road, Bankstown*, March 2011 (72087.01); and
- *Report on Supplementary Geotechnical Investigation, Proposed Medical Centre, 14-20 Eldridge Road, Bankstown*, March 2013 (72087.02).

From these investigations, a total of seven test bores (numbered 1 to 3 and 101 to 104) were drilled at the site. The test bore locations are shown on Drawing 1, Appendix A, and the test bore logs are included in Appendix H.

Asphaltic concrete was drilled through at Test Bores 3, 103 and 104. A thin layer of roadbase was encountered beneath the asphaltic concrete at Test Bores 3 and 103. Topsoil comprising brown silty clay was encountered at Test Bores 1, 2 and 101 to depths of between 0.3 m and 0.4 m. Test Bore 102 was drilled through a surface layer (0.1 m thick) of filling comprising yellow-brown, brown and grey sand with some basalt and concrete fragments. This was underlain by filling comprising brown and grey-brown clay filling with some sand, sandstone gravel and basalt gravel to a depth of 0.4 m. Filling was encountered at Test Bore 104 to a depth of 0.3 m and comprised brown sand with some basalt gravel with a trace of silt.

The topsoil, roadbase and filling was underlain by natural orange brown, red-brown and grey clay to depths of between 0.5 m and 1.1 m. The clay was underlain by light grey, grey, brown, red-brown and orange-brown siltstone (and shale at Test Bore 104) which was underlain by light grey, grey, and brown grey laminite (at Test Bores 1, 3, 103, and 104). Test bores were discontinued in either siltstone or laminite at depths ranging from 1.3 m to 8.5 m.

No free groundwater was observed during augering of the test bores. Test bore 102 was extended to a depth of 1.4 m, left open for approximately 6 hours and no groundwater ingress was observed on the day of drilling. The use of circulating water during rock coring precluded the measurement of groundwater below the depths of augering.

5. Site History

Site history information from readily available sources has been reviewed for this PSI to determine potentially contaminated activities, contamination sources and types of contamination that may have occurred or may be present at the site. The findings of the review are described below.

5.1 Historical Aerial Photographs

Historical aerial photographs were obtained from the NSW Department of Land and Property Information and a copy is provided in Appendix D. The aerial photographs were reviewed to identify possible past uses and features of the site and surrounding area. The findings are summarised below.

- **1930:** Despite the low quality of the photograph, the 1930 image shows that the site was undeveloped. Eldridge Road was present to the north. Much of the land surrounding the site was undeveloped although residences may have been present on the neighbouring land to the east and south.
- **1943:** The eastern part of the site appears to have been developed into a builder's yard or depot (or similar). Two buildings were present at the eastern site boundary and large items, possibly timber logs, were stored at the southern part of the yard. The western part of the site remained undeveloped. Much of the land surrounding the site was undeveloped, although neighboring properties to the south and east were probably used for residential purposes. A small market garden may have been present on the neighbouring property to the east.
- **1951:** It is difficult to determine from the low quality of the 1951 image, but it appears that the eastern part of the site continued to be used as a builder's yard (or Council depot) and the western part of the site had been subject to the development of a residence and an awning. Land surrounding the site had been subject to significant development, which appears to have been primarily residential.
- **1961:** The builder's yard (or depot) at the east of the site appears to have been expanded to include the south-western part of the site and some of the neighboring land to the west. An additional building had been constructed in the north of the builder's yard. Numerous vehicles were parked at the yard. An additional residence had been developed at the north-western part of the site. Land surrounding the site had been further developed since 1951, with some commercial development to the east and residential development to the north.
- **1978:** The builder's yard (or depot) had been replaced by a large commercial building at the east of the site and surrounding parking area. The two residential properties, present in 1961, remained at the site, and a shed appears to have been constructed at the central part of the site. Surrounding land uses appear to be similar to that in 1961, although the land to the west, previously used as part of the builder's yard, appears to have been disused.
- **1986:** The site appears to have been relatively unchanged since 1978, although awnings appear to have been constructed at the western residential property. Surrounding land-uses appear to have been unchanged since 1978, except that further residential development had occurred to the west.

- **2002:** One of the residential properties had been subject to demolition and all structures appear to have been removed. The other residential property and the commercial premises appear to be relatively unchanged since 1986. Surrounding land uses appear to have been relatively unchanged since 1986, although residential villas to the west had been constructed.
- **2014:** The 2014 image shows that all buildings at the site had been demolished. A site shed was present at the north of the site. The asphalt parking area (which surrounded the former commercial building) remained. Surrounding land uses appear to be similar to those in 2002.

5.2 Historical Title Deeds

A historical title deeds search is used to obtain ownership or occupancy information for the land parcels that comprise the site, including company names and the occupations of individuals. The title information can assist in the identification of previous land uses by the identification of company names or site owners and can, therefore, assist in establishing whether there were potentially contaminating activities occurring at the site. The results of the title deed search are provided in Appendix E and summarised in Tables 1 to 6, which also list possible land uses inferred from property ownership, aerial photographs and other information.

Table 1: Summary Results of Title Deeds Search as Regards Lot 1 DP374220

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vacant
15.5.1931 (1931 to 1946)	Edward Albert Favell (Gardener)	Vacant
17.9.1946 (1946 to 1996)	Harry Dobson Ford (Breadcarter) & Doreen Ford (his wife)	Residential
23.2.1996 (1996 to 1999)	Van Xuan Huynh Kim Lien Tran & Chi Tai Truong	Residential
25.10.1999 (1999 to 2007)	Van Xuan Huynh & Kim Lien Tran	Residential
16.10.2007 (2007 to 2013)	Safety Scene Pty Ltd	Residential, commercial or vacant
21.1.2013 (2013 to Date)	# Hansen Beslich Nominees Pty Limited	Vacant

Denotes current registered proprietor

Table 2: Summary Results of Title Deeds Search as Regards Lot 1 DP374219

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vacant

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
15.5.1931 (1931 to 1944)	Sarah Favell (Married Woman)	Vacant
20.7.1944 (1944 to 1946)	Hilda Irene McKenzie (nee Wicks) (Married Woman)	Vacant or residential
12.8.1946 (1946 to 1949)	Mavis Alma Petersen (Spinster)	Vacant or residential
18.4.1949 (1949 to 1949)	Russell Kliendienst (Baker) & Elsie Kliendienst (his wife)	Vacant or residential
9.8.1949 (1949 to 1971)	Ronald Alfred Peel (Hairdresser) & Marjorie Joyce Peel (his wife)	Residential
15.11.1971 (1971 to 1976)	Dimitrios Tamvakeras (Milk Bar Proprietor) & Athanasia Tamvakeras (his wife)	Residential
4.6.1976 (1976 to 1986)	John Tamvakeras (Milk Bar Proprietor) & Helen Tamvakeras (his wife)	Residential
30.7.1986 (1986 to 1997)	Charbel Tannous & Angeil Tannous	Residential
8.8.1997 (1997 to 2002)	Ngoc Tinh Vu & Thi Nga Vu	Residential
6.3.2002 (2002 to 2007)	Kevin Emanuel Zammitt & David Wing Cheung Mann	Residential or vacant
10.12.2007 (2007 to 2013)	Safety Scene Pty Limited	Vacant
21.1.2013 (2013 to Date)	# Hansen Beslich Nominees Pty Limited	Vacant

Table 3: Summary Results of Title Deeds Search as Regards SP20206 Numbered (1) on the cadastre, Appendix E

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vacant
15.5.1931 (1931 to 1946)	Edward Albert Favell (Gardener)	Vacant
17.9.1946 (1946 to 1951)	Harry Dobson Ford (Breadcarter) & Doreen Ford (his wife)	Vacant
15.10.1951 (1951 to 1957)	The Council of the Municipality of Bankstown	Council depot or yard

Table 4: Summary Results of Title Deeds Search as Regards SP20206 Numbered (2) on the cadastre, Appendix E

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vacant
15.5.1931 (1931 to 1944)	Sarah Favell (Married Woman)	Vacant
20.7.1944 (1944 to 1946)	Hilda Irene McKenzie (nee Wicks) (Married Woman)	Vacant
12.8.1946 (1946 to 1949)	Mavis Alma Petersen (Spinster)	Vacant
18.4.1949 (1949 to 1949)	Russell Kliendienst (Baker) & Elsie Kliendienst (his wife)	Vacant
9.8.1949 (1949 to 1951)	Ronald Alfred Peel (Hairdresser) & Marjorie Joyce Peel (his wife)	Vacant
15.10.1951 (1951 to 1957)	The Council of the Municipality of Bankstown	Council depot or yard

Table 5: Summary Results of Title Deeds Search as Regards SP20206 Numbered (3) on the cadastre, Appendix E

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
Circa 1912 (1912 to 1935)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) and Lucy Ruth Violet Atkinson (Widow)	Vacant
14.8.1935 (1935 to 1936)	Charles Whildson Boniface (Engineer)	Vacant
6.1.1936 (1936 to 1957)	The Council of the Municipality of Bankstown	Council depot or yard

Table 6: Summary Results of Title Deeds Search as Regards to the Whole of SP20206

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Possible Site Use
2.4.1957 (1957 to 1974)	The Sydney County Council	Council depot or yard
18.7.1974 (1974 to 1977)	The Council of the Municipality of Bankstown	Council depot or yard
17.3.1977 (1977 to 1983)	Griffiths Bros. Investments Pty Limited	Medical centre
2.6.1983 (1983 to Date)	# The Owners – Strata Plan No. 20206	Medical centre and vacant

Notes: # Current registered proprietor

Registration of numerous leases for SP20206 were not investigated.

5.3 Regulatory Notices Search

The Protection of the Environment Operations Act 1997 (POEO Act) public register, maintained by NSW Environmental Protection Authority (EPA), contains information about environment protection licences and other regulatory information required under the *Protection of the Environment Operations Act 1997* (POEO Act). Although numerous licences were listed for the suburb of Bankstown, a search of the register on 31 July 2015 revealed no licences or information in regards to the site and neighbouring properties. The nearest property listed was the Bankstown-Lidcombe Hospital which is approximately 400 m to the west of the site.

The Contaminated Land Record of Notices, published by NSW EPA, contains a database of:

- Orders made under Part 3 of the *Contaminated Land Management Act 1997* (CLM Act);
- Approved voluntary management proposals under the CLM Act that have not been fully carried out and where the approval of the NSW EPA has not been revoked;
- Site audit statements provided to the NSW EPA under section 53B of the CLM Act that relate to significantly contaminated land;
- Where practicable, copies of anything formerly required to be part of the public record; and
- Actions taken by EPA under section 35 or 36 of the *Environmentally Hazardous Chemicals Act 1985* (EHC Act).

A search of the record on 31 July 2015 did not reveal any listings for the suburb of Bankstown.

The NSW EPA provides a 'List of NSW contaminated sites notified to the EPA' for sites that have been notified to the NSW EPA about contamination under Section 60 of the *Contaminated Land Management Act 1997*. It should be noted that not all contaminated sites in NSW are listed. A search of the list conducted on 31 July 2015 did not list the site or nearby properties.

5.4 Section 149 Certificates

According to the Planning Certificate issued under Section 149 of the Planning and Assessment Act, 1979, as at 19 March 2015, Lot 1 in Deposited Plan 374220 and Lot 1 in Deposited Plan 374219 are zoned as R2 Low Density Residential, and Strata Plan 20206 is zoned as SP2 Infrastructure: Health Services Facility. Each certificate states there are no matters arising under Section 59(2) of the Contaminated Land Management Act 1997. Copies of the certificates are provided in Appendix F.

5.5 WorkCover Records

A search of the WorkCover NSW database for licences to keep dangerous goods did not reveal any information pertaining to the site. A copy of the search result is provided in Appendix G.

5.6 Council Records

An informal Access to Information request was submitted to Council to determine if there were any previous contamination assessments for the site or if chemical stores had previously been present. From a review a records for the site and liaison with Council officers, Council could not locate any contamination issues with respect to the site.

6. Potential Contamination Sources and Preliminary Conceptual Site Model

6.1 Potential Contamination Sources

Based on current and previous site uses and DP's site observations, the potential sources of contamination and associated contaminants are summarised in Table 7. Discussion of previous site uses based on historical findings is further discussed in Section 10.1.

Table 7: Potential Sources of Contamination

Potential Source of Contamination	Chemicals of Concern
Previous use as a Council depot/yard	Various possible including heavy metals, total petroleum hydrocarbons (TPH), BTEX, PAH and phenols.
Imported filling from a contaminated source to form/level the site	Various possible including heavy metals, TPH, BTEX, PAH, PCB, OCP, phenols and asbestos.
Demolition of buildings containing hazardous building materials	Asbestos, PCB and lead
Fly tipping	Various possible including (primarily) asbestos, PCB, lead and OCP

Note: As no current point sources (such as underground storage tanks) have been identified, for the purpose of preparing a conceptual site model, these can be grouped as one source (i.e. S1 – Contaminated ground).

6.2 Potential Receptors

Potential receptors of contamination have been identified to include:

- R1 – Construction workers;
- R2 – Future maintenance workers;
- R3 – Future site users (occupants, visitors and staff);
- R4 – Land users in adjacent areas;
- R5 – Groundwater;
- R6 – Surface water body (Salt Pan Creek);
- R7 – Terrestrial or local ecology; and
- R8 – In-ground structures.

6.3 Potential Pathways

Potential pathways for contamination to impact on receptors include the following:

- P1 – Ingestion and dermal contact;
- P2 – Inhalation of dust;
- P3 – Inhalation of vapours;
- P4 – Leaching of contaminants and vertical migration into groundwater;
- P5 – Lateral migration of groundwater providing base flow to watercourses;
- P6 – Surface water runoff;
- P7 – Direct contact of contaminated ground with ecological receptors; and
- P8 – Direct contact of contaminated ground with in ground structures.

6.4 Preliminary Conceptual Site Model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how a site can become contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e. it enables an assessment of the potential source – pathway – receptor linkages. The preliminary CSM is presented in Table 8.

Table 8: Preliminary Conceptual Site Model

Source	Transport Pathway	Receptor	Notes
S1 - Contaminated ground (from filling, previous site use and demolition of buildings)	P1 – Ingestion and dermal	R1 – Construction workers	Health-based assessment of soil contamination has been undertaken in this assessment.
	P2 - Inhalation of dust	R2 - Future maintenance workers	Soil vapour sampling has not been undertaken as part this assessment. Soil vapour investigation may be required if volatile contaminants in the soil are identified.
	P3 – Inhalation of vapours	R3 – Future Site Users	
	P2 - Inhalation of dust	R4 – Land users in adjacent areas;	Health-based assessment of soil contamination has been undertaken in this assessment.
	P3 – Inhalation of vapours		Soil vapour sampling has not been undertaken as part this assessment. Soil vapour investigation maybe required if soil contamination is identified.
	P4 - Leaching of contaminants & vertical migration	R5 - Groundwater	Groundwater has not been investigated as part this assessment. Investigation maybe required if significant soil contamination is identified.
	P5 – Lateral migration of groundwater	R6 – Surface water body	
P6 – Surface water runoff			
P7 – Direct contact with ecological receptors	R7 –Terrestrial or local ecology	Ecological assessment of soil contamination has been undertaken in this assessment.	
P8 – Direct contact with in ground structures	R8 - In ground structures	Management limits for TPH used as assessment criteria in this investigation.	

7. Fieldwork, Analysis and QA/QC

7.1 Sample Location and Rationale

The site covers an area of approximately 4,375 m² (0.4375 ha). According to the NSW EPA publication, *Sampling Design Guidelines* (1995), a minimum of 12 systematic sampling points are required to characterise a site of this size. No point sources of contamination such as fuel storage tanks were identified at the site prior to commencing fieldwork, so 12 sampling points were spread across the site to achieve site coverage and meet the recommended sample density. Test pits were positioned to avoid damage to buried services.

According to Schedule B2 of *National Environment Protection (Assessment of Site Contamination) Measure 1999*, as amended 2013 (NEPC, 2013), a minimum of three samples are recommended for characterisation of a stockpile of less than 75 m³. Therefore, three samples were collected from the stockpile which has a volume of approximately 25 m³.

7.2 Soil Sampling Methods

Prior to commencing sampling, all sample locations were cleared for underground services by a services locator. Soil samples were collected at regular depths and for each observed soil type.

All sampling data was recorded on DP's test pit logs, provided in Appendix H. The general sampling procedure adopted for the collection of soil samples for chemical analysis was:

- Collect soil samples from excavator bucket returns;
- Transfer samples into laboratory-prepared glass jars, completely filled to minimise the headspace within the sample jar, and capping immediately to minimise loss of volatiles;
- Label sample containers with individual and unique identification, including project number, sample location and sample depth; and
- Place the glass jars, with Teflon lined lid, into a cooled, insulated and sealed container for transport to the laboratory.

Replicate soil samples were collected in zip-lock bags for PID screening.

7.3 Analytical Scheme and Rationale

Samples for laboratory analysis, listed in Table 9, were selected based on field observations. Filling samples were targeted for analysis as filling was considered to have a higher potential for containing contaminants than the natural soil. No signs of contamination were noted in the natural soil samples. Samples of filling containing building rubble were selected for asbestos analysis given that asbestos contamination can be associated with building rubble in filling. A soil sample has been analysed from every test pit to provide site coverage.

Table 9: Analytical Scheme for Soils

Sample Location	Sample Depth (m)	Soil Type	Metals	TRH & BTEX	PAH	OCP	PCB	Phenols	Asbestos
TP201	0.1-0.2	filling	✓	✓	✓	✓	✓	✓	✓
TP202	0.1-0.2	filling	✓	✓	✓				✓
TP203	0.1-0.2	filling	✓	✓	✓	✓	✓	✓	✓
TP204	0.1-0.2	filling	✓	✓	✓				✓
TP205	0.05-0.1	filling	✓	✓	✓				✓
TP206	0.1-0.2	filling	✓	✓	✓				✓
TP206	0.7-0.8	natural	✓	✓	✓				

Sample Location	Sample Depth (m)	Soil Type	Metals	TRH & BTEX	PAH	OCP	PCB	Phenols	Asbestos
TP207	0.1-0.2	filling	✓	✓	✓	✓	✓	✓	✓
BD4/270715	0.1-0.2	filling	✓	✓					
TP208	0.1-0.2	filling	✓	✓	✓	✓	✓	✓	✓
TP209	0.1-0.2	filling	✓	✓	✓	✓	✓	✓	✓
TP210	0.2-0.3	filling	✓	✓	✓	✓	✓	✓	✓
TP211	0.3-0.4	filling	✓	✓	✓	✓	✓	✓	✓
BD6/270715	0.3-0.4	filling	✓	✓					
TP212	0.3-0.4	natural	✓	✓	✓				
SP1	-	stockpile	✓	✓	✓				✓
SP2	-	stockpile	✓	✓	✓	✓	✓	✓	✓
SP3	-	stockpile	✓	✓	✓				

Notes: BD4/270715 is blind replicate of TP207 / 0.1-0.2 m

BD6/270715 is blind replicate of TP211/0.3-0.4 m

In addition to the analytical scheme shown in Table 9, two filling samples and one natural soil sample were analysed for pH and CEC to determine site specific ecological assessment criteria (see Section 8.1.2). Two filling samples with elevated concentrations of lead and benzo(a)pyrene were subject to TCLP analysis for waste classification purposes (see Section 10.3).

7.4 Quality Assurance and Quality Control

The field QC procedures for sampling were undertaken as prescribed in Douglas Partners' *Field Procedures Manual*. The results of field QA/QC procedures as well as a discussion of Data Quality Objectives (DQO) and Data Quality Indicators (DQI) for the assessment are provided in Appendix J.

The analytical laboratories, accredited by NATA, are required to conduct in-house QA/QC procedures. These are normally incorporated into every analytical run and include reagent blanks, spike recovery, surrogate recovery and duplicate samples. These results are included in the laboratory certificates in Appendix I and discussed in Appendix J.

8. Site Assessment Criteria

Based on conceptual layout plans (dated 2 June 2015), the site is proposed be developed into a Residential Care Facility (for aged care) which will include one basement level for car parking and back of house facilities, and four levels for bedrooms and associated care and shared facilities. The basement will cover most of the site, as will the building footprint.

The Site Assessment Criteria (SAC) applied in the current investigation are informed by the CSM which identified human and ecological receptors to potential contamination on the site (refer to Section 6). Analytical results were assessed (as a Tier 1 assessment) against the SAC comprising the investigation and screening levels of Schedule B1, *National Environment Protection (Assessment of*

Site Contamination) Measure 1999, as amended 2013 (NEPC, 2013). The NEPC guidelines are endorsed by the NSW EPA under the CLM Act 1997.

The investigation and screening levels are applicable to generic land use settings and include consideration of, where relevant, the soil type and the depth of contamination. The investigation and screening levels are not intended to be used as clean up levels. Rather, they establish concentrations above which further appropriate investigation (e.g. Tier 2 assessment) should be undertaken. They are intentionally conservative and are based on a reasonable worst-case scenario.

The investigation and screening levels applied in the current investigation comprise levels adopted for a generic residential land use with minimal opportunities for soil access scenario.

8.1 Soils

8.1.1 Health Investigation and Screening Levels

The Health Investigation Levels (HIL) and Health Screening Levels (HSL) are scientifically-based, generic assessment criteria designed to be used in the first stage (Tier 1) of an assessment of potential human health risk from chronic exposure to contaminants.

HILs are applicable to assessing health risk arising via all relevant pathways of exposure for a range of metals and organic substances. The HIL are generic to all soil types and apply generally to a depth of 3 m below the surface for residential use. Site-specific conditions may determine the depth to which HILs apply for other land uses.

HSLs are applicable to selected petroleum compounds and fractions to assess the risk to human health via inhalation and direct contact pathways. HSL have been developed for different land uses, soil types and depths to contamination.

The generic HIL and HSL are considered to be appropriate for the assessment of contamination at the site. Given the proposed land use, HIL B and HSL B have been adopted. HIL B and HSL B are appropriate for a residential land use with minimal opportunities for soil access, including dwellings with fully and permanently paved yard space such as high-rise buildings and apartments. It is noted that the conceptual layout plans (dated 6 May 2015) do not clearly indicate which parts of the site are to be garden or landscape areas (i.e. areas of accessible soil), but it is assumed that these areas will be minimal for the overall site development given the size of the proposed building footprint and basement. It is also noted that young children (aged 2-3 years), which are usually the most sensitive age group to health risks associated with soil contamination in both low-density and high-density residential settings, will not be residents of the proposed development, so HIL for a more sensitive land use scenario (i.e. HIL A) are not considered to be appropriate.

In addition, the HSL adopted are predicated on the inputs summarised in Table 10.

Table 10: Inputs to the Derivation of HSLs

Variable	Input	Rationale
Potential exposure pathway	Soil vapour intrusion (inhalation)	Although construction workers may come in direct contact with soil, direct contact values have not been included as these values are much higher than vapour intrusion HSLs and, hence, are not drivers for further investigation. Assessment for potential soil vapour intrusion should be considered for a residential development.
Soil Type	Sand, silt or clay	As different soil types were encountered, the most conservative HSLs have been selected from each soil type (sand, silt or clay) as an initial screen. Further consideration to soil type will need to be given if concentrations are above these conservative HSL.
Depth to contamination	0 m to <1 m	The most conservative HSLs have been adopted as an initial screen. Further consideration to depth will need to be given if concentrations are above these conservative HSL.

The adopted HILs and HSLs for the contaminants of concern are shown on Table 11.

Table 11: Health Investigation Levels for soil contaminants

Contaminant	HIL Residential B (mg/kg)	HSL B (mg/kg)
Metals and Inorganics		
Arsenic	500	-
Cadmium	150	-
Chromium (VI)	500	-
Copper	30 000	-
Lead	1200	-
Mercury (inorganic)	120	-
Nickel	1200	-
Zinc	60 000	-
TRH		
C6 – C10 (less BTEX)	-	40
>C10-C16 (less Naphthalene)	-	110
BTEX		
Benzene	-	0.5
Toluene	-	160
Ethylbenzene	-	55
Xylenes	-	40
PAHs		
Carcinogenic PAHs (as Benzo(a)pyrene TEQ)	4	-
Naphthalene	-	3
Total PAHs	400	-
OCP		
DDT+DDE+DDD	600	-
Aldrin + Dieldrin	10	-
Chlordane	90	-
Endosulfan (total)	400	-
Endrin	20	-
Heptachlor	10	-
HCB	15	-
Methoxychlor	500	-
Phenols		
Value for Pentachlorophenol used as a screening value for Total Phenols	130	-
Other Organics		
PCBs (non dioxin- like PCB only)	1	-

8.1.2 Ecological Investigation Levels and Screening Levels

Ecological Investigation Levels (EIL) have been derived for selected metals and organic compounds and are applicable for assessing risk to terrestrial ecosystems (NEPC, 2013). EIL depend on specific soil physiochemical properties and land use scenarios and generally apply to the top 2 m of soil, which corresponds to the root zone and habitation zone of many species. The EIL is determined for a contaminant based on the sum of the ambient background concentration (ABC) and an added contaminant limit (ACL). The ABC of a contaminant is the soil concentration in a specific locality that is the sum of naturally occurring background levels and the contaminants levels that have been introduced from diffuse or non-point sources (e.g. motor vehicle emissions). The ACL is the added concentration (above the ABC) of a contaminant above which further appropriate investigation and evaluation of the impact on ecological values is required.

The EIL is calculated using the following formula:

$$\text{EIL} = \text{ABC} + \text{ACL},$$

The ABC is determined through direct measurement at an appropriate reference site (preferred) or through the use of methods defined by Olszowy et al Trace element concentrations in soils from rural and urban areas of Australia, Contaminated Sites monograph no. 4, South Australian Health Commission, Adelaide, Australia 1995 (Olszowy, 1995) or Hamon et al, Geochemical indices allow estimation of heavy metal background concentrations in soils, Global Biogeochemical Cycles, vol. 18, GB1014, (Hamon, 2004). ACL is based on the soil characteristics of pH, CEC and clay content.

EIL (and ACLs where appropriate) have been derived in NEPC (2013) for only a short list of contaminants comprising arsenic, copper, chromium (III), DDT, naphthalene, nickel, lead and zinc. An *Interactive (Excel) Calculation Spreadsheet* was used for calculating site-specific EIL for these contaminants, and has been provided in the ASC NEPM Toolbox available on the SCEW (Standing Council on Environment and Water) website (<http://www.scew.gov.au/node/941>).

The adopted EIL, derived from the *Interactive (Excel) Calculation Spreadsheet* are shown in the following Table 12. The following site specific data and assumptions have been used to determine the EILs:

- A protection level of 80% for urban residential areas and public open space has been adopted;
- The EILs will apply to the top 2 m of the soil profile;
- Given the likely source of soil contaminants (i.e. historical site use/fill) the contamination is considered as “aged” (>2 years);
- ABCs have been derived using the *Interactive (Excel) Calculation Spreadsheet* using input parameters of NSW for the State in which the site is located, and high for traffic volumes;
- A pH value of 6.4 has been used as an input parameter as pH results ranged between 5.0 and 7.7 from laboratory analysis (see laboratory certificate 131837, Appendix I). The pH input value is the median (and average) of the pH test results;
- A CEC value of 6.2 cmol_c/kg has been used as an input parameter, as CEC results ranged from 5.8 cmol_c/kg to 7.3 cmol_c/kg from laboratory analysis (see laboratory certificate 131837, Appendix I). The CEC input value is the median of the CEC test results (and is less than the average of the test results, so is considered to be conservative);

- A clay content of 10% has been used as an input parameter, although no laboratory analysis was undertaken for clay content. Although filling was observed to contain different types of soil, soils at the site are primarily of a clay type and, therefore, the clay content input value is considered to be conservative; and
- An organic carbon content value of 0.5% has been used as an input parameter, although no laboratory analysis was undertaken for organic carbon content. The input value is considered to be conservative.

Table 12: Ecological Investigation Levels (EIL) in mg/kg

Analyte		EIL
Metals	Arsenic	100
	Copper	140
	Nickel	60
	Chromium III	410
	Lead	1100
	Zinc	400
PAH	Naphthalene	170
OCP	DDT	180

Ecological Screening Levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. ESL apply to the top 2 m of the soil profile as for EIL.

ESL have been derived in NEPC (2013) for total petroleum hydrocarbon (TPH) fractions as well as BTEX and benzo(a)pyrene. Site specific data and assumptions as summarised in Table 13 have been used to determine the ESL. The adopted ESL, from Table 1B(6), Schedule B1 of NEPC (2013) are shown in Table 14.

Table 13: Inputs to the Derivation of ESL

Variable	Input	Rationale
Depth of ESL application	Top 2 m of the soil profile	The top 2 m depth below ground level corresponds to the root zone and habitation zone of many species.
Land use	Urban residential and public open space	Site is proposed to become an urban residence.
Soil Texture	Coarse and fine	As different soil types were encountered (both coarse and fine soils), the more conservative ESL for coarse or fine soils have been selected as an initial screen.

Table 14: Ecological Screening Levels (ESL) in mg/kg

Analyte		ESL	Comments
TRH	C6 – C10 (less BTEX)	180*	All ESLs are low reliability apart from those marked with * which are moderate reliability
	>C10-C16	120*	
	>C16-C34	300	
	>C34-C40	2800	
BTEX	Benzene	50	
	Toluene	85	
	Ethylbenzene	70	
	Xylenes	45	
PAH	Benzo(a)pyrene	0.7	

8.1.3 Management Limits – Petroleum Hydrocarbons

In addition to appropriate consideration and application of the HSLs and ESLs, there are additional considerations which reflect the nature and properties of petroleum hydrocarbons, including:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosion hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services.

Management Limits to avoid or minimise these potential effects have been adopted in NEPC (2013) as interim Tier 1 guidance. Management Limits have been derived in NEPC (2013) for the same four petroleum fractions as the HSLs (F1 to F4). The adopted Management Limits, from Table 1B(7), Schedule B1 of NEPC (2013) are shown in Table 15. The following site specific data and assumptions have been used to determine the Management Limits:

- the Management Limits will apply to any depth within the soil profile;
- The Management Limits for residential, parkland and public open space apply; and
- the soils encountered at the site comprised various types. A “coarse” soil texture (being the most conservative soil type) has been adopted.

Table 15: Management Limits in mg/kg

Analyte		Management Limit
TRH	C ₆ – C ₁₀	700
	>C ₁₀ -C ₁₆	1,000
	>C ₁₆ -C ₃₄	2,500
	>C ₃₄ -C ₄₀	10,000

8.1.4 Asbestos in Soil

Bonded asbestos containing material (ACM) is the most common form of asbestos contamination across Australia, generally arising from:

- Inadequate removal and disposal practices during demolition of buildings containing asbestos products;
- Widespread dumping of asbestos products and asbestos containing fill on vacant land and development sites; and
- Commonly occurring in historical fill containing unsorted demolition materials.

Mining, manufacturing or distribution of asbestos products may result in sites being contaminated by friable asbestos including free fibres. Severe weathering or damage to bonded ACM may also result in the formation of friable asbestos comprising fibrous asbestos (FA) and/or asbestos fines (AF).

Asbestos only poses a risk to human health when asbestos fibres are made airborne and inhaled. If asbestos is bound in a matrix such as cement or resin, it is not readily made airborne except through substantial physical damage. Bonded ACM in sound condition represents a low human health risk, whilst both FA and AF materials have the potential to generate, or be associated with, free asbestos fibres. Consequently, FA and AF must be carefully managed to prevent the release of asbestos fibres into the air.

A detailed asbestos assessment was not undertaken as part of these works as it was unknown at the time of preparing the proposal if asbestos was a likely contaminant. As an initial screen, the site assessment criteria for asbestos are as follows:

- No visible asbestos cement materials (ACM) at the sampling locations; and
- No asbestos detected at the laboratory reporting limit of 0.1 g/kg.

9. Field and Analytical Results

9.1 Field Observations

Test pits 202, 204 and 205 were excavated through a thin surface layer of brown silty clay topsoil (filling). Test pits 201 and 209 were excavated through a thin surface layer of asphalt gravel and grass. Test pits 203, 207, 208 and 212 were excavated through an asphalt surface. Test pits 206, 210 and 211 were excavated into filling soil (i.e. no topsoil or asphalt at the surface of these test pits).

Filling was encountered to depths of up to 0.85 m below the ground surface, but was typically to a depth of approximately 0.3 m. Dark grey, grey or brown gravel roadbase filling was encountered at some test locations. Other filling materials mainly comprised: dark brown or light brown sand; light brown, dark brown or brown sandy clay; light brown, brown, red, light grey or orange silty clay; and light brown clayey sand. Asphalt was encountered in filling at Test Pits 201 (depth 0.05 to 0.3 m), 206 (depth 0.09 to 0.3 m), 208 (depth 0.07 to 0.2 m), 209 (0.08 to 0.6 m) and 211 (0.2 to 0.5 m). Building rubble including brick fragments and concrete fragments was encountered in filling at Test Pits 209 (depth 0.08 to 0.6 m), 210 (depth 0 to 0.4 m), and 211 (depth 0 to 0.5 m). It is noted that the filling

with building rubble was identified in the test pits excavated within the previous medical centre building footprint. It is also noted that filling containing anthropogenic materials (asphalt and building rubble) was usually underlain by filling absent of anthropogenic materials. Asphalt and gravel roadbase at Test Pit 212 was underlain by natural soil.

Natural soils encountered included orange, red and light grey silty clay as well as light grey shaly clay. All test pits were discontinued in natural soils. Final excavation depths for test pits ranged between 0.65 m and 1.25 m.

No signs of contamination were encountered in any of the test pits. Although no asbestos containing materials (ACM) were observed in the filling, building rubble was noted in the filling at test pits at the previous medical centre building footprint. Asbestos contamination can sometimes be associated with building in filling. As noted in Section 3.2, one fragment of fibre-cement (collected as a sample) was observed on the filling at the previous medical centre footprint.

Free groundwater was not observed at any test pit.

Test pit logs are provided in Appendix H and should be referenced for detailed descriptions of filling and natural soils.

The stockpile was observed to comprise brown silty clay with inclusions of plastic, terracotta pipe fragments, metal pieces, rubber tubing, bricks, glass and tiles.

9.2 Field Testing Results

Replicate soil samples collected in plastic zip lock bags were allowed to equilibrate under ambient temperatures before screening for Total Photoionisable Compounds (TOPIC) using a calibrated photo-ionisation detector (PID). The PID readings, as shown in the Test Pit logs in Appendix H were all <5 ppm indicating a low potential for volatile compounds.

9.3 Laboratory Results

The laboratory certificates of analysis are provided in Appendix I. A summary of results compared to the SAC is provided in Table 16.

Table 17 shows the laboratory results of filling and stockpiles samples compared to criteria sourced from NSW EPA, *Waste Classification Guidelines*, November 2014 for preliminary *in situ* waste classification purposes.

Table 16: Summary of Results of Soil Analysis (All results in mg/kg unless otherwise stated)

Sample Location (Test Bore) or Sample ID	Sample Depth (m)	Soil Type	Heavy Metals								Polycyclic Aromatic Hydrocarbons				Petroleum Hydrocarbons										Organochlorine Pesticides										PCBs (total)	Phenols (total)	Asbestos (fibres)	
			Arsenic	Cadmium	Chromium (III + VI)	Copper	Lead	Mercury	Nickel	Zinc	Benzo(a)pyrene	Benzo(a)pyrene TEQ	Naphthalene	Total PAHs	TRH C6-C10 less BTEX	TRH >C10-C16 less Naphthalene	TRH C6-C10	TRH >C10-C16	TRH >C16-C34	TRH >C34-C40	Benzene	Toluene	Ethylbenzene	Total Xylene	DDT	DDT+DDE+DDD	Aldrin + Dieldrin	Chlordane	Endosulfan (total)	Endrin	Heptachlor	HCB	Methoxychlor					
TP201	0.1-0.2	filling	8	0.4	11	32	78	<0.1	9	200	0.07	<0.5	<0.1	0.19	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	<0.7	<5	NAD		
TP202	0.1-0.2	filling	14	<0.4	20	8	29	<0.1	5	68	<0.05	<0.5	<0.1	NIL (+)VE	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	NAD			
TP203	0.1-0.2	filling	7	0.7	14	22	69	<0.1	6	190	<0.05	<0.5	<0.1	NIL (+)VE	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.7	<5	NAD			
TP204	0.1-0.2	filling	13	<0.4	18	5	13	<0.1	4	9	<0.05	<0.5	<0.1	NIL (+)VE	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	NAD			
TP205	0.05-0.1	filling	10	<0.4	13	12	41	<0.1	3	39	0.07	<0.5	<0.1	0.47	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	NAD			
TP206	0.1-0.2	filling	11	1	17	21	51	<0.1	6	140	0.4	0.6	<0.1	5.1	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	NAD			
TP206	0.7-0.8	natural	13	<0.4	14	9	9	<0.1	2	17	<0.05	<0.5	<0.1	NIL (+)VE	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	-			
TP207	0.1-0.2	filling	8	<0.4	11	62	93	<0.1	10	49	0.4	0.6	<0.1	4.6	<25	<50	<25	<50	120	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	0.1	<5	NAD			
BD4/270715	0.1-0.2	filing	20	<0.4	25	12	22	<0.1	6	52	-	-	<1	-	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	-			
TP208	0.1-0.2	filling	9	<0.4	13	93	73	<0.1	6	77	0.1	<0.5	<0.1	1.3	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	0.3	<5	NAD		
TP209	0.1-0.2	filling	5	<0.4	15	140	140	<0.1	19	120	3.3	4.6	<0.1	34	<25	<50	<25	<50	140	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	<0.7	<5	NAD		
TP210	0.2-0.3	filling	<4	<0.4	7	18	14	<0.1	4	26	0.6	0.8	<0.1	6.6	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	<0.7	<5	NAD		
TP211	0.3-0.4	filling	9	<0.4	14	160	180	<0.1	9	90	5.4	7.6	<0.1	65	<25	<50	<25	<50	210	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	0.7	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	<0.7	<5	NAD		
BD6/270715	0.3-0.4	filling	11	<0.4	15	170	180	<0.05	12	110	-	-	<0.5	-	<20	<50	<20	<50	180	<100	<0.1	<0.1	<0.1	<0.3	-	-	-	-	-	-	-	-	-	-	-			
TP212	0.3-0.4	natural	6	<0.4	10	13	10	<0.1	2	14	<0.05	<0.5	<0.1	NIL (+)VE	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-		
SP1	stockpile		8	<0.4	8	35	16	<0.1	21	89	0.3	<0.5	<0.1	3.5	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	-	NAD		
SP2	stockpile		8	<0.4	7	39	16	<0.1	32	110	0.1	<0.5	<0.1	1.4	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	<0.1	<0.3	<0.2	<0.2	<0.3	<0.1	<0.1	<0.1	<0.1	<0.7	<5	NAD		
SP3	stockpile		12	<0.4	13	40	19	<0.1	18	120	0.3	<0.5	<0.1	4.5	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<3	-	-	-	-	-	-	-	-	-	-	-	-		
Site Assessment Criteria																																						
HIL Residential B			500	150	500 for Cr (VI)	30000	1200	120	1200	60000	-	4	-	400	-	-	-	-	-	-	-	-	-	-	-	600	10	90	400	20	10	15	500	1	130	-		
HSL B			-	-	-	-	-	-	-	-	-	-	3	-	40	110	-	-	-	-	0.5	160	55	40	-	-	-	-	-	-	-	-	-	-	-	-		
EIL			100	-	410	140	1100	-	60	400	-	-	170	-	-	-	-	-	-	-	-	-	-	180	-	-	-	-	-	-	-	-	-	-	-	-		
ESL			-	-	-	-	-	-	-	-	0.7	-	-	-	180	-	-	120	300	2800	50	85	70	45	-	-	-	-	-	-	-	-	-	-	-	-		
Management Limit			-	-	-	-	-	-	-	-	-	-	-	-	-	-	700	1000	2500	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Adopted Health Screening Level			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NAD		

Notes

NAD

No asbestos detected at limit of reporting (0.1g/kg)

PQL

Practical Quantitation Limit

BD4/270715

Blind replicate of TP20,7, depth 0.1-0.2 m

BD6/270715

Blind replicate of TP211, depth 0.3-0.4 m

BOLD

Exceeds ESL or EIL

BOLD

Exceeds HIL or HSL

-

Not tested / Not applicable

TEQ

Toxicity Equivalent Quotient

Table 17: Summary of Results of Soil Analysis for Waste Classification of Filling and Stockpile

Sample Location	Sample Depth (m)	Metals							Polycyclic Aromatic Hydrocarbons			Total Recoverable Hydrocarbons		BTEX				Asbestos	Total Polychlorinated Biphenyls (PCB)	Organochlorine Pesticides (OCP)	
		Arsenic	Cadmium	Chromium (III + VI)	Lead	Lead in TCLP	Mercury	Nickel	Benzo(a)pyrene	Benzo(a)pyrene in TCLP	Total PAH	C6-C9	C10-C36	Benzene	Toluene	Ethylbenzene	Total Xylene			Endosulfan	Total
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			(mg/kg)	(mg/kg)
TP201	0.1-0.2	8	0.4	11	78	-	<0.1	9	0.07	-	0.19	<25	<250	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
TP202	0.1-0.2	14	<0.4	20	29	-	<0.1	5	<0.05	-	NIL (+)VE	<25	<250	<0.2	<0.5	<1	<3	NAD	-	-	-
TP203	0.1-0.2	7	0.7	14	69	-	<0.1	6	<0.05	-	NIL (+)VE	<25	<250	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
TP204	0.1-0.2	13	<0.4	18	13	-	<0.1	4	<0.05	-	NIL (+)VE	<25	<250	<0.2	<0.5	<1	<3	NAD	-	-	-
TP205	0.05-0.1	10	<0.4	13	41	-	<0.1	3	0.07	-	0.47	<25	<250	<0.2	<0.5	<1	<3	NAD	-	-	-
TP206	0.1-0.2	11	1	17	51	-	<0.1	6	0.4	-	5.1	<25	<250	<0.2	<0.5	<1	<3	NAD	-	-	-
TP207	0.1-0.2	8	<0.4	11	93	-	<0.1	10	0.4	-	4.6	<25	<250	<0.2	<0.5	<1	<3	NAD	0.1	<0.3	0.1
BD4/270715	0.1-0.2	20	<0.4	25	22	-	<0.1	6	-	-	-	<25	<250	<0.2	<0.5	<1	<3	-	-	-	-
TP208	0.1-0.2	9	<0.4	13	73	-	<0.1	6	0.1	-	1.3	<25	<250	<0.2	<0.5	<1	<3	NAD	0.3	<0.3	0.3
TP209	0.1-0.2	5	<0.4	15	140	0.07	<0.1	19	3.3	<0.001	34	<25	<250	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
TP210	0.2-0.3	<4	<0.4	7	14	-	<0.1	4	0.6	-	6.6	<25	<250	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
TP211	0.3-0.4	9	<0.4	14	180	0.62	<0.1	9	5.4	<0.001	65	<25	230	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
BD6/270715	0.3-0.4	11	<0.4	15	180	-	<0.05	12	-	-	-	<20	200	<0.1	<0.1	<0.1	<0.3	-	-	-	-
SP1	stockpile	8	<0.4	8	16	-	<0.1	21	0.3	-	3.5	<25	<250	<0.2	<0.5	<1	<3	NAD	-	-	-
SP2	stockpile	8	<0.4	7	16	-	<0.1	32	0.1	-	1.4	<25	<250	<0.2	<0.5	<1	<3	NAD	<0.7	<0.3	<PQL
SP3	stockpile	12	<0.4	13	19	-	<0.1	18	0.3	-	4.5	<25	<250	<0.2	<0.5	<1	<3	-	-	-	-
General Solid Waste Criteria (without TCLP)																					
CT1		100	20	100 for Cr(IV)	100	-	4	40	0.8	-	200	10000	40000	10	288	600	1000	-	<50	60	<50*
General Solid Waste Criteria (with TCLP)																					
TCLP1		-	-	-	-	5	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-
SCC1		-	-	-	1500	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-

Notes

- BD4/270715
- is blind replicate of TP207, depth 0.1-0.2 m
- BD6/270715
- is blind replicate of TP211, depth 0.3-0.4 m
- CT
- Contaminant Threshold
- SCC
- Specific Contaminant Concentration
- NAD
- No asbestos detected at reporting limit of 0.1g/kg
- PQL
- Practical Quantification Limit
- *
- Value for scheduled chemicals
-
- Not Applicable / Not Defined / Not analysed

10. Discussion

10.1 Site History

According to aerial photographs and historical title deeds, the eastern half of the site was probably developed in circa 1936 for use as a Council depot. The depot was expanded to include the south-western part of the site in the 1950s. Two residences had been developed at the north-western part of the site between 1943 and 1961.

The eastern and south-western parts of the site which had been occupied by the Council depot, were developed in the 1970s into a commercial building with surrounding parking area. The building was presumably used as a medical centre for about 30 years until it was demolished. One of the residences at the north-west had been demolished by 2002. The other residential property, at the north-west corner, may have been used for commercial purposes for a short time prior to its demolition.

10.2 Contaminants in Soil (including Stockpile)

Concentrations of metals in soil samples (including from the stockpile) are within the respective HIL and EIL, except for the concentrations of copper (160 mg/kg and 170 mg/kg) in the filling samples collected from Test Pit 211, depth 0.3-0.4 m, which are above the EIL (140 mg/kg). The concentration of copper for the filling sample from Test Pit 209, depth 0.1 - 0.2 m, is equal to the EIL. Statistical analysis using Pro UCL 5.0 (computer program) for filling samples (including the highest concentration from Test Pit 211, depth 0.3-0.4 m) indicates that these elevated concentrations of copper are not significant. (The statistics include: a mean of 53 mg/kg, a standard deviation of 57.1 mg/kg which is less than half of the EIL, and a 95% Adjusted Gamma UCL of 115.1 mg/kg which is less than the EIL).

Concentrations of total PAH and naphthalene are within the respective HIL, HSL and EIL. However, concentrations of benzo(a)pyrene TEQ are above the HIL (4 mg/kg) in the filling samples from Test Pit 209, depth 0.1 – 0.2 m (4.6 mg/kg), and Test Pit 211, depth 0.3 - 0.4 m (7.6 mg/kg). Statistical analysis using Pro UCL 5.0 for filling sample indicates that the concentration of benzo(a)pyrene TEQ at Test Pit 211, depth 0.3 - 0.4 m, is significant (as the standard deviation of 2.234 mg/kg is more than half of the HIL). Also, the concentrations of benzo(a)pyrene in the analysed filling samples from Test Pit 209 (3.3 mg/kg) and Test Pit 211 (5.4 mg/kg) are more than 2.5 times above the EIL (0.7 mg/kg).

Concentrations of BTEX and TRH C_6 - C_{10} , TRH $>C_{10}$ - C_{16} and TRH $>C_{34}$ - C_{40} were below the limit of reporting for all analyse samples. TRH $>C_{16}$ - C_{34} was detected in some filling samples. Concentrations of TRH and BTEX were within the respective HSL, ESL and management limits.

Dieldrin was detected in the sample from Test Pit 211, depth 0.3 - 0.4 m. Concentrations of OCP were below the limit of reporting for all other analysed samples. Concentrations of OCP for all analysed samples were within the respective HIL and EIL.

PCB was detected in two of the analysed filling samples (Test Pit 207, depth 0.1 - 0.2 m and Test Pit 208, depth 0.1 - 0.2 m). Concentrations of PCB in all analysed samples were within the HIL.

Total phenols were not detected in any analysed sample, and, therefore, concentrations were within the HIL.

Asbestos was not detected at the limit of reporting in the analysed soil samples. Potential asbestos containing materials were not observed in the test pits, although one fragment of fibre-cement was observed on the soil surface at the former medical centre building footprint and fibre-cement sheeting was observed at the south-east corner of the site (see Section 3.2).

The elevated concentrations of copper, benzo(a)pyrene and benzo(a)pyrene TEQ mentioned above appear to associated with the heterogeneous filling noted within the previous medical centre building footprint (including at Test Pit 208, to depth 0.2 m; Test Pit 209, to depth 0.6 m; Test Pit 210, to depth 0.4 m; Test Pit 211, to depth 0.5 m) which was noted to contain asphalt, bricks and concrete.

10.3 Preliminary Waste Classification

10.3.1 Filling and Stockpile

Concentrations of metals in soil samples (including the stockpile samples) are within the CT1 criteria for General Solid Waste except for concentrations of lead in the samples from Test Pit 211, depth 0.3-0.4 m, and Test Pit 209, depth 0.1-0.2 m. These samples (excluding the replicate sample, BD6/270715) were subject to TCLP analysis for lead. Concentrations of lead were within the SCC1 and TCLP1 criteria for General Solid Waste when used together.

Concentrations of total PAH were within the CT1 criterion for General Solid Waste. Concentrations of benzo(a)pyrene were within the CT1 criterion, except for samples from Test Pit 211, depth 0.3-0.4 m, and Test Pit 209, depth 0.1-0.2 m. These samples were subject to TCLP analysis for PAH (including benzo(a)pyrene). Concentrations of leachable PAH were below limits of reporting. Concentrations of benzo(a)pyrene were within the SCC1 and TCLP1 criteria for General Solid Waste when used together.

Concentrations of TRH, BTEX, PCB and OCP were within the CT1 criteria for General Solid Waste.

Asbestos was not detected in soil samples at the limit of reporting and potential asbestos containing materials were not observed in the test pits.

Based on the observations at the time of sampling and the reported analytical results, filling (including topsoil) and the stockpile described in this report (see Section 9.1 and Test Pit logs, Appendix H) have a preliminary *in situ* waste classification as General Solid Waste (non-putrescible) defined in EPA (2014). It is, however, noted that building rubble (for example, bricks) has been identified in some of the filling, particularly within the previous medical centre building footprint. Asbestos can be associated with building rubble in filling, and asbestos is classified as special waste. Therefore, the General Solid Waste classification does not apply for soils observed to contain asbestos-containing materials during excavation.

10.3.2 Natural Soil and Rock

The POEO Act defines virgin excavated natural material (VENM) as:

'natural material (such as clay, gravel, sand, soil or rock fines):

(a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and

(b) that does not contain any sulfidic ores or soils or any other waste

and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved for the time being pursuant to an EPA Gazettal notice.'

Additional advice is provided on the EPA web site [<http://www.epa.nsw.gov.au/waste/virgin-material.htm>] entitled 'Virgin Excavated Natural Material'. By definition, VENM cannot contain any other waste, or be 'made' from processed soils. Excavated material that has been processed in any way cannot be classified as VENM.

Testing on the two natural soil samples (from Test Pit 206, depth 0.7-0.8 m; and Test Pit 212, depth 0.3-0.4 m) revealed concentrations of metals at background levels and concentrations of PAH, TRH and BTEX below the limits of reporting. Signs of contamination were not identified in the natural soil during investigations. Based on the analytical results and observations, the natural orange, brown, red and grey silty clay and shaley clay as well as the underlying grey, brown, red-brown and orange-brown siltstone are preliminary classified as VENM. This classification does not apply if the material shows signs of contamination (for example, odours or staining) or is mixed with any non-VENM materials.

10.4 Recommendations

Bulk excavation will be required to accommodate the basement for the proposed development. There is, thus, the opportunity to remove all the PAH contaminated soil from the area of the previous building footprint through excavation and offsite disposal. The contamination is considered likely to be limited to the upper layer(s) of filling which was noted to contain anthropogenic materials (for example, asphalt, bricks and concrete). Therefore, the likely approach for remediation is to:

- Excavate the heterogeneous filling from the previous medical centre building footprint (at Test Pits 208 to 211). According to the test pit logs, the subject filling noted to contain anthropogenic materials will vary to depths of between 0.2 m and 0.5 m. The excavated filling would be appropriately classified and disposed to landfill; and
- The resultant excavation and underlying soils (filling or natural) can then be inspected and sampled by an environmental consultant to determine if the contaminated filling has been removed. Identification of contaminated soil through observations and/or laboratory testing, may result in the need for further "chase out" of contamination.

Given that building rubble has been identified in filling, an Unexpected Finds Protocol (UFP) should be prepared for the case that asbestos containing materials (or potential asbestos containing materials) in filling are identified during excavation. The UFP would provide the procedures for assessing and managing the asbestos contamination for appropriate disposal.

Prior to commencing excavation works, the fibre-cement sheeting waste (from fly tipping) should be appropriately disposed to landfill. This can be done by a licenced asbestos removal contractor (although it is noted that removal of less than 10 m² of ACM does not require a licenced contractor).

Given that evidence of fly-tipping is present at the site and one fragment of fibre cement was observed on the soil surface during fieldwork, the contractor should conduct a walkover of site to collect any fragments of potential asbestos containing materials, which may have become apparent subsequent to this investigation. The UFP would be initiated if asbestos contaminated soil is identified (or suspected) by the contractor.

Given that concentrations of contaminants in the filling are generally low; the TCLP results have shown a very low potential for leaching of the identified PAH in filling; and the observed absence of up-gradient potential sources of contamination; it is considered that groundwater investigations are not warranted. It is also considered that soil vapour investigations are also not warranted given that volatile contaminants were not encountered in the soil.

11. Conclusion

This investigation comprised a review of site history, a site walkover and an intrusive soil investigation to provide data on the contamination status of the site. Some near-surface, soil contamination has been identified from sampling. Given that bulk excavation will be undertaken to accommodate the proposed basement, the contamination can be effectively removed by excavation and off-site disposal.

Filling has a preliminary *in situ* waste classification of General Solid Waste and natural soil / rock has a preliminary *in situ* classification of VENM. A UFP should be established in the case potential asbestos containing materials are encountered during excavation.

On the basis of the investigation findings, it is considered that the site can be made suitable for the proposed residential development.

12. Limitations

Douglas Partners (DP) has prepared this report for this project at 14 – 20 Eldridge Road, Bankstown, in accordance with DP's proposal dated 14 July 2015 and acceptance received from Mr Danny Kataieh of Hansen Yuncken Pty Ltd on 16 July 2015. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of Hansen Yuncken Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

Asbestos has not been detected by observation or by laboratory analysis at the test pit locations. Building demolition materials, such as brick fragments, were, however, located in previous below-ground filling and these are considered as indicative of the possible presence of hazardous building materials (HBM), including asbestos. Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. This is either due to undetected variations in ground conditions or to parts of the site being inaccessible and not available for inspection. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations, and hence no warranty can be given that asbestos is not present.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Division 4, Section 45, of *The Protection of the Environment Operations (Waste) Regulation 2014* states that it is an offence for waste to be transported to a place that cannot lawfully be used as a facility to accept that waste. It is the duty of the owner and transporter of the waste to ensure that the waste is disposed of appropriately. DP does not accept liability for the unlawful disposal of waste materials from any site. DP accepts no responsibility for the material tracking, loading, management, transport or disposal of waste from the site. Before disposal of the material to a licensed landfill is undertaken, the waste producer will be required to obtain prior consent from the landfill. Both the receiving site and the site disposing of the material should satisfy the requirements of the licence before disposal of the material is undertaken. Note that appropriate prior arrangement with the receiving site/relevant authorities should be obtained prior to the disposal of any material off site. The receiving site should check to ensure that the material received matches the description provided in this report and contains no cross contamination.

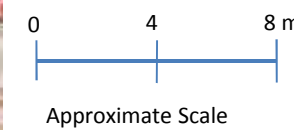
The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this

report and to their application by the project designers to project design, construction, maintenance and demolition.

Douglas Partners Pty Ltd

Appendix A

Drawing 1



Source: SIX Maps website (NSW Land & Property Information)

Legend

- Test Pit
- Previous Geotechnical Test Bore
- Site Boundary

Appendix B

Site Photographs



Photograph 1 - Substation at north of site



Photograph 2 - Looking south towards footprint of previous medical centre



Site Photographs

Proposed Residential Care Facility
14-20 Eldridge Road, Bankstown

CLIENT: Hansen Yuncken Pty Ltd

PROJECT: 82087.03

PLATE No: B1

REV: A

DATE: 4-Aug-15



Photograph 3 - Ground surface at previous medical centre footprint



Photograph 4 - Stockpile

	Site Photographs		PROJECT: 82087.03
	Proposed Residential Care Facility		PLATE No: B2
	14-20 Eldridge Road, Bankstown		REV: A
	CLIENT: Hansen Yuncken Pty Ltd		DATE: 4-Aug-15



Photograph 5 - north-western part of site



Photograph 6 - Small stockpiles of waste concrete, timber and bricks



Site Photographs

Proposed Residential Care Facility
14-20 Eldridge Road, Bankstown

CLIENT: Hansen Yuncken Pty Ltd

PROJECT: 82087.03

PLATE No: B3

REV: A

DATE: 4-Aug-15



Photograph 7 - Waste materials (including fibre-cement sheeting) at south-east corner



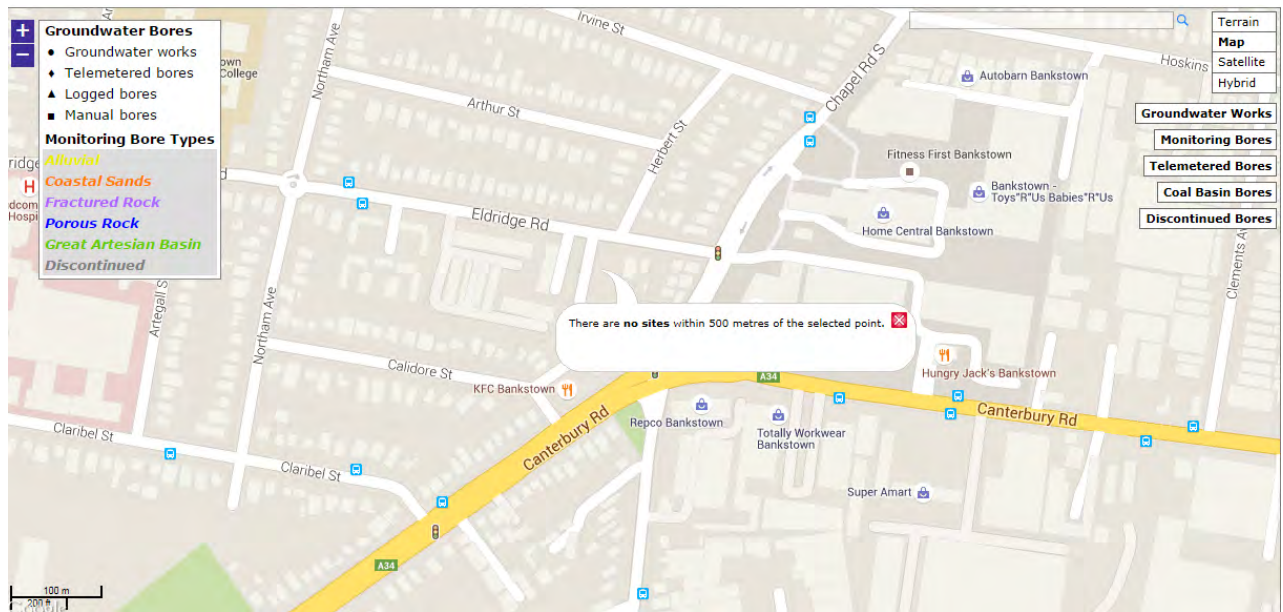
Photograph 8 - Test Pit 211

 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT: 82087.03
	Proposed Residential Care Facility		PLATE No: B4
	14-20 Eldridge Road, Bankstown		REV: A
	CLIENT: Hansen Yuncken Pty Ltd		DATE: 4-Aug-15

Appendix C

Results of Groundwater Bore Search

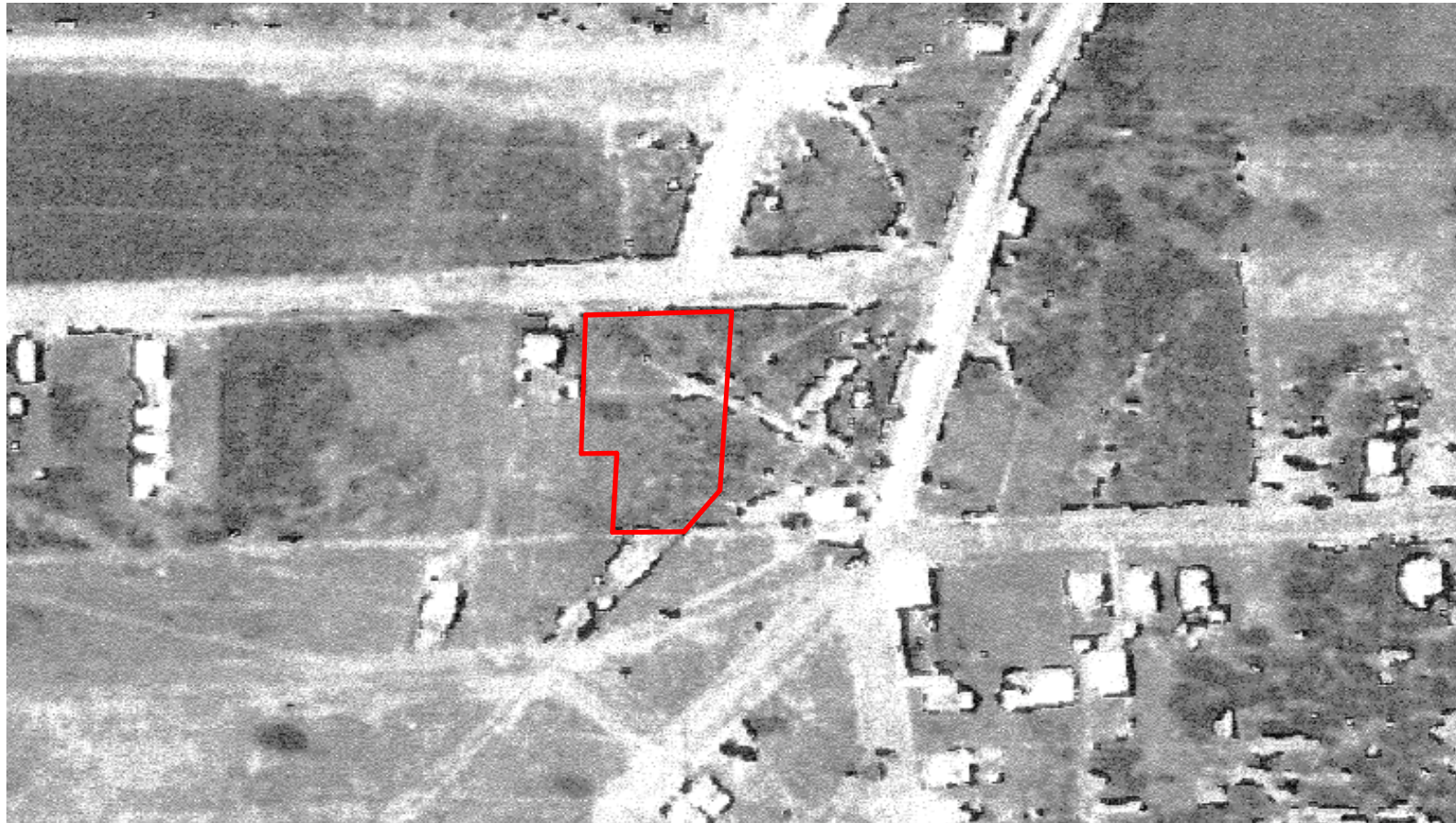
Results of Groundwater Bore Search



Source: <http://allwaterdata.water.nsw.gov.au/water.stm>

Appendix D

Historical Aerial Photographs









CLIENT: Hansen Yuncken Pty Ltd

OFFICE: Sydney

DATE: 31 Jul 2015

1961 Aerial Photograph

Proposed Residential Care Facility

14-20 Eldridge Road, Bankstown

PROJECT No: 72087.03

PLATE No: D4

REVISION: A









CLIENT: Hansen Yuncken Pty Ltd

OFFICE: Sydney

DATE: 31 Jul 2015

2014 Aerial Photograph

Proposed Residential Care Facility

14-20 Eldridge Road, Bankstown

PROJECT No: 72087.03

PLATE No: D8

REVISION: A

Appendix E

Historical Title Deeds Search Results

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Legal Liaison Searching Services

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

Summary of Owners Report

LPI

Sydney

Address: - 14-20 Eldridge Road, Bankstown

Description: - Lot 1 D.P. 374220

Lot 1 D.P. 374219

Common Property S.P.20206

As regards Lot 1 D.P.374220

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vol 2251 Fols 113, 114 & 115
15.5.1931 (1931 to 1946)	Edward Albert Favell (Gardener)	Vol 2251 Fols 113, 114 & 115 Now Vol 4484 Fol 10
17.9.1946 (1946 to 1996)	Harry Dobson Ford (Breadcarter) & Doreen Ford (his wife)	Vol 4480 Fol 10 Thence Vol 6394 Fol 169 Now Folio 1/374220
23.2.1996 (1996 to 1999)	Van Xuan Huynh Kim Lien Tran & Chi Tai Truong	Folio 1/374220
25.10.1999 (1999 to 2007)	Van Xuan Huynh & Kim Lien Tran	Folio 1/374220
16.10.2007 (2007 to 2013)	Safety Scene Pty Ltd	Folio 1/374220
21.1.2013 (2013 to Date)	# Hansen Beslich Nominees Pty Limited	Folio 1/374220

Denotes current registered proprietor

Easements: - NIL

Leases: - NIL

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

As regards Lot 1 D.P. 374219

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vol 2251 Fols 113, 114 & 115
15.5.1931 (1931 to 1944)	Sarah Favell (Married Woman)	Vol 2251 Fols 113, 114 & 115 Now Vol 4484 Fol 11
20.7.1944 (1944 to 1946)	Hilda Irene McKenzie (nee Wicks) (Married Woman)	Vol 4484 Fol 11
12.8.1946 (1946 to 1949)	Mavis Alma Petersen (Spinster)	Vol 4484 Fol 11
18.4.1949 (1949 to 1949)	Russell Kliendienst (Baker) & Elsie Kliendienst (his wife)	Vol 4484 Fol 11
9.8.1949 (1949 to 1971)	Ronald Alfred Peel (Hairdresser) & Marjorie Joyce Peel (his wife)	Vol 4484 Fol 11 Now Vol 6394 Fol 172
15.11.1971 (1971 to 1976)	Dimitrios Tamvakeras (Milk Bar Proprietor) & Athanasia Tamvakeras (his wife)	Vol 6394 Fol 172
4.6.1976 (1976 to 1986)	John Tamvakeras (Milk Bar Proprietor) & Helen Tamvakeras (his wife)	Vol 6394 Fol 172
30.7.1986 (1986 to 1997)	Charbel Tannous & Angeil Tannous	Vol 6394 Fol 172 Now Folio 1/374219
8.8.1997 (1997 to 2002)	Ngoc Tinh Vu & Thi Nga Vu	Folio 1/374219
6.3.2002 (2002 to 2007)	Kevin Emanuel Zammitt & David Wing Cheung Mann	Folio 1/374219
10.12.2007 (2007 to 2013)	Safety Scene Pty Limited	Folio 1/374219
21.1.2013 (2013 to Date)	# Hansen Beslich Nominees Pty Limited	Folio 1/374219

Denotes current registered proprietor

Easements: - NIL

Leases: - NIL

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

As regards the part of S.P.20206 numbered (1) on the attached cadastre

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vol 2251 Fols 113, 114 & 115
15.5.1931 (1931 to 1946)	Edward Albert Favell (Gardener)	Vol 2251 Fols 113, 114 & 115 Now Vol 4484 Fol 10
17.9.1946 (1946 to 1951)	Harry Dobson Ford (Breadcarter) & Doreen Ford (his wife)	Vol 4480 Fol 10 Now Vol 6394 Fol 170
15.10.1951 (1951 to 1957)	The Council of the Municipality of Bankstown	Vol 4480 Fol 10 Now Vol 6394 Fol 170

As regards the part of S.P.20206 numbered (2) on the attached cadastre

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
Circa 1912 (1912 to 1931)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) & Lucy Ruth Violet Atkinson (Widow)	Vol 2251 Fols 113, 114 & 115
15.5.1931 (1931 to 1944)	Sarah Favell (Married Woman)	Vol 2251 Fols 113, 114 & 115 Now Vol 4484 Fol 11
20.7.1944 (1944 to 1946)	Hilda Irene McKenzie (nee Wicks) (Married Woman)	Vol 4484 Fol 11
12.8.1946 (1946 to 1949)	Mavis Alma Petersen (Spinster)	Vol 4484 Fol 11
18.4.1949 (1949 to 1949)	Russell Kliendienst (Baker) & Elsie Kliendienst (his wife)	Vol 4484 Fol 11
9.8.1949 (1949 to 1951)	Ronald Alfred Peel (Hairdresser) & Marjorie Joyce Peel (his wife)	Vol 4484 Fol 11
15.10.1951 (1951 to 1957)	The Council of the Municipality of Bankstown	Vol 4484 Fol 11 Now Vol 6394 Fol 173

As regards the part of S.P.20206 numbered (3) on the attached cadastre

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
Circa 1912 (1912 to 1935)	Caroline Gertrude Hunt (Spinster) Amy Alice Hunt (Spinster) and Lucy Ruth Violet Atkinson (Widow)	Vol 2251 Fols 113, 114 & 115
14.8.1935 (1935 to 1936)	Charles Whildson Boniface (Engineer)	Vol 2251 Fols 113, 114 & 115 Now Vol 4708 Fol 47
6.1.1936 (1936 to 1957)	The Council of the Municipality of Bankstown	Vol 4708 Fol 47

Legal Liaison Searching Services

ABN: 52832569710
Ph: 02 9233 5800
Fax: 02 9221 2827

Level 4, 70 Castlereagh Street,
Sydney 2000
PO Box 2513 Sydney NSW 2000
DX 1019 Sydney

Continued as regards the whole of S.P.20206 (excluding that part now comprised in S.P.41494)

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
2.4.1957 (1957 to 1974)	The Sydney County Council	Vol 4708 Fol 47, Vol 6394 Fols 170 & 173
18.7.1974 (1974 to 1977)	The Council of the Municipality of Bankstown	Vol 4708 Fol 47, Vol 6394 Fols 170 & 173 Now Vol 13218 Fol 228
17.3.1977 (1977 to 1983)	Griffiths Bros. Investments Pty Limited	Vol 13218 Fol 228 Now Vol 14343 Fol 14
2.6.1983 (1983 to Date)	# The Owners – Strata Plan No. 20206	Vol 15065 Fol 113 Now Folio CP/SP20206

Denotes current registered proprietor

Easements:-

- Circa 1912 Easement for drainage (C58064)
- Circa 1912 Easement for drainage (C58065)
- Circa 1977 Easement for drainage (DP586972)
- 4.3.1981 Right of carriageway (DP611213) – Released 1984 V249054
- 4.3.1981 Easement for services (DP611213) – Released 1984 V249054

Leases: -

- 17.3.1980 to Sydney County Council for substation premises together with right of way and easement for electricity purposes – expires 17.10.2026
- During the course of this search the registration of numerous leases of part premises was noted on Vol 13218 Fol 228 and Vol 14343 Fol 14 – all of which have expired due to the effluxion of time or subsequently surrendered, not investigated

Yours Sincerely
Peter Boyer
19 July 2015

Cadastral Records Enquiry Report

Ref : surv:scim-grollm

Locality : BANKSTOWN

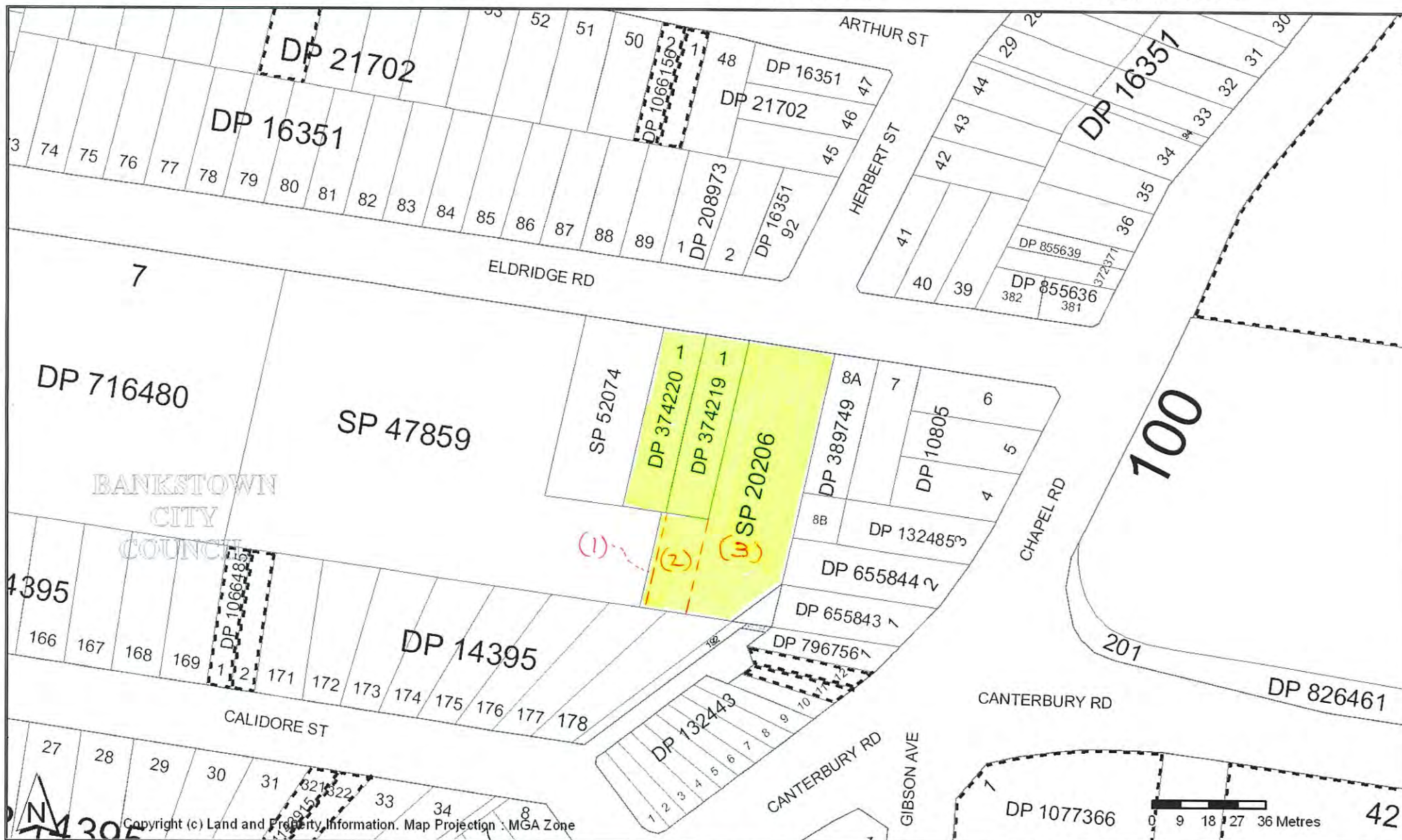
Requested Parcel : Lot 1 DP 374219

LGA : BANKSTOWN

Parish : BANKSTOWN

Identified Parcel : Lot 1 DP 374219

County : CUMBERLAND



Copyright (c) Land and Property Information. Map Projection : MGA Zone

CONVERSION TABLE ADDED IN
DEPARTMENT OF LANDS

FEET INCHES	METRES
5	1.524
45	13.716
100	30.480
190 2 3/8	57.972
190 2 1/2	57.976
290 2 3/8	88.452

A	R	P	SQM
—	—	16 1/4	411
—	—	3 1/4	790.4

F508385

PLAN

- of Subdivision of Lot 12 Eldridge R^o DP 10805 Leaving portion —
- at rear 45' x 100' to be consolidated with rear portion of Lot 11 —
- and Lot 10, Council Land.

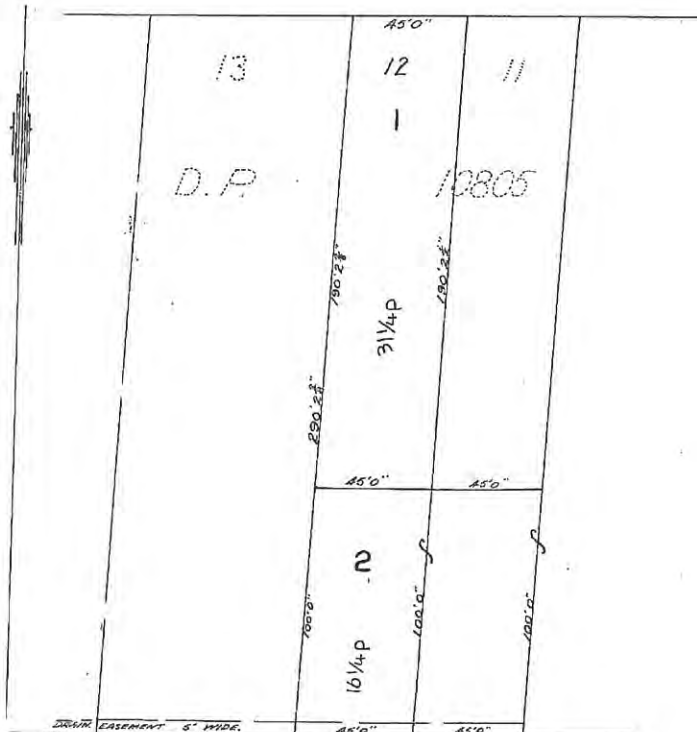
FP374220

This Plan (which is also the Plan covered by my Certificate No. 3753, and dated 25.6.51) was approved by The Council of the Municipality of Bankstown on the 22.5.51 when authority was given to affix the Seal of Council hereto.

B. Barth
Mayor,
Municipality of Bankstown.

Misc. Plan of Subdn. (R.P.)
Regd. No. 74220

ELDRIDGE R^o



Not a summary of the original plan. The original plan is referred to by the title 'Eldridge R^o DP 10805' and is deposited in the office of the Registrar General.

Bankstown Municipal Council.

I, Bruce Richard Davies, Under Secretary for Lands and Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this day.

8th October, 1981

AMENDMENTS AND/OR ADDITIONS NOTED ON
PLAN IN REGISTRAR GENERAL'S OFFICE

10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

CONVERSION TABLE ADDED IN
DEPARTMENT OF LANDS



FEET	INCHES	METRES
5	-	1.524
100	-	30.480
190	2 1/2	51.816
290	2 5/8	81.280
390	2 5/8	111.816
490	2 5/8	142.352
590	2 5/8	172.888
690	2 5/8	203.424
790	2 5/8	233.960

F508383

PLAN

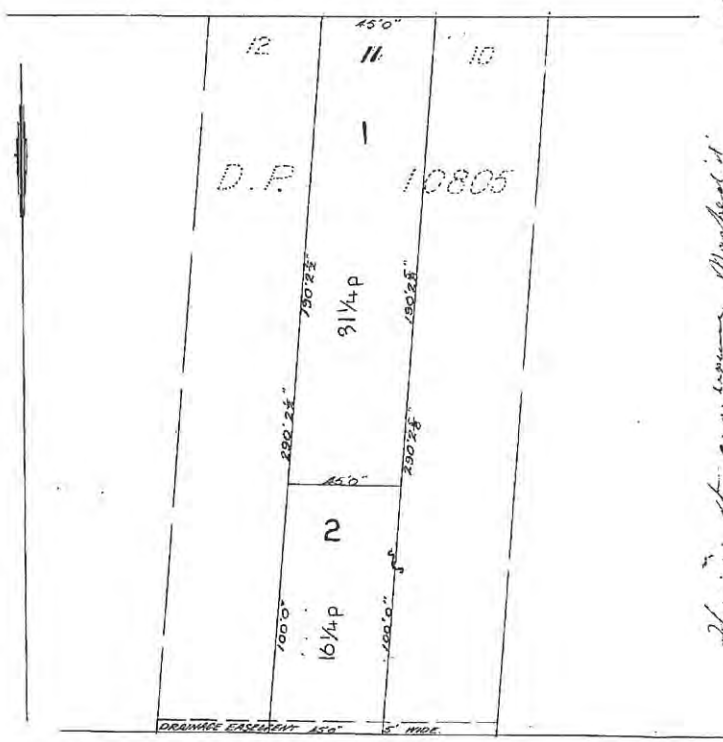
- of Subdivision of Lot 11 Eldridge R^o DP 10805 leaving -
- portion 100ft x 45ft. to be consolidated with Council land Lot 10 -

FP 374219

cc: Plan of Subdiv. (R.P.)
Regd. No. 74219

This Plan (which is also the plan covered by my
Certificate No. 3752, and dated 25.6.51)
was approved by The Council of the Municipality of
Bankstown on the 22.5.51 when authority
was given to affix the Seal of Council hereto.
R. Barkle
Mayor
Municipality of Bankstown.

ELDRIDGE R^o



FOR EVIDENCE OF COUNCIL'S
APPROVAL SEE DEALING

C.A. No 3753 of 25.6.51

BANKSTOWN MUNICIPAL COUNCIL

Scale: 40 Ft to 1 in

REC. 17-6-51

I, Bruce Richard Davies, Under Secretary for Lands and
Registrar General for New South Wales, certify that this
negative is a photograph made as a permanent record of a
document in my custody this day.

8th October, 1981

AMENDMENTS AND/OR ADDITIONS NOTED ON
PLAN IN REGISTRAR GENERAL'S OFFICE

10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

1

Plan drawing only to appear in this space.

Council's Certificate The Council of the City of BANKSTOWN, having satisfied itself that the requirements of the Strata Titles Act, 1973 (other than the requirements for the registration of plans) have been complied with, approves of the proposed strata plan. *strata plan of subdivision illustrated herein. *Council does not object to the encroachment of the building beyond the alignment of This approval is given on the condition that lot(s) is/are subject to the restriction on user referred to in section 39 of the Strata Titles Act, 1973. Date 21.4.88 Subdivision No. 100185 <i>[Signature]</i> Council Clerk *Complete, or delete if inapplicable.	Surveyor's Certificate I, WILLIAM LAWRENCE REIN of COLWELL LARCOMBE & REIN-104 BATHURST ST. SYDNEY a surveyor registered under the Surveyors Act, 1929, hereby certify that — - any wall, the inner surface or any part of which corresponds substantially with any line shown on the accompanying floor plan as a boundary of a proposed lot, exists; - any floor or ceiling, the upper or under surface or any part of which forms a boundary of a proposed lot, shown in the accompanying floor plan, exists; - any wall, floor, ceiling or structural cubic space, by reference to which any boundary of a proposed lot shown in the accompanying floor plan is defined, exists; - any building containing proposed lots erected on the land shown on the accompanying location plan and each proposed lot shown on the accompanying floor plan are wholly within the perimeter of the parcel subject to subparagraphs (a) and (b) — (a) except to the extent that the building encroaches on a public place; (b) eaves and gutters of the building encroach on land other than a public place, in respect of which eaves and gutters on appropriate easement has been created by registered plan. *5: the survey information recorded in the accompanying location plan is accurate. Signature <i>[Signature]</i> Date 28.3.88 *Delete if inapplicable. †State whether dealing or plan, and quote registered number. This is sheet 1 of my Plan in 2 sheets.
--	--

PLAN OF STRATA SUBDIVISION OF LOT 123 IN D.P. 611213	
Mun./Shire CITY: BANKSTOWN Parish: BANKSTOWN Reduction Ratio 1: 500	Locality: BANKSTOWN County: CUMBERLAND Lengths are in metres
Name of, and *address for service of notices on, the body corporate. "THE PROPRIETORS" STRATA PLAN N° 20206 N° 14 ELDRIDGE RD, BANKSTOWN N.S.W. *Address required on original strata plan only.	

STRATA PLAN 20206
Registered: <i>[Stamp]</i> 17.5.1988 C.A.: N° 100185 OF 21.4.1983 Purpose: STRATA PLAN Ref. Map: U0037-12# Last Plan: D. P. 611213

Signatures, seals and statements of intention to create easements or restrictions as to user.

The Common Seal of **GRIFFITHS BROS. INVESTMENTS PTY. LTD.**

was hereunto affixed by the authority of the Board of Directors in the presence:

[Signature] Director

[Signature] Secretary

26-4-88

For and on behalf of AUSTRALIAN EUROPEAN FINANCE CORPORATION LIMITED,
the Attorneys **JAMES GUILD**
and **TREVOR McDONALD**
who declare that the Power of Attorney No. 738 Book J-517 has not been revoked.

[Signature]
Trevor McDonald

[Signature]
Witness — Justice of the Peace

The diagram illustrates the layout of Lot 123, which contains a two-storey brick building. The lot is bounded by Eldridge Rd. to the north and east, and Lane to the south. Various easements are shown, labeled A through D, including rights of carriageway and drainage easements. Dimensions for boundaries and easements are provided throughout the plan.

- Easement A:** RIGHT OF CARRIAGEWAY & EASEMENT FOR SERVICES SEE DP611213
- Easement B:** EASEMENT FOR DRAINAGE 2.44 WIDE (D.P. 586972)
- Easement C:** EASEMENT FOR DRAINAGE 2.44 WIDE SEE C 58064
- Easement D:** EASEMENT FOR DRAINAGE 2.44 WIDE SEE C 58065

Other features include the "TWO STOREY BRICK BUILDING N° 14", "ELDRIDGE RD.", "LANE", and "D.P. 611213".

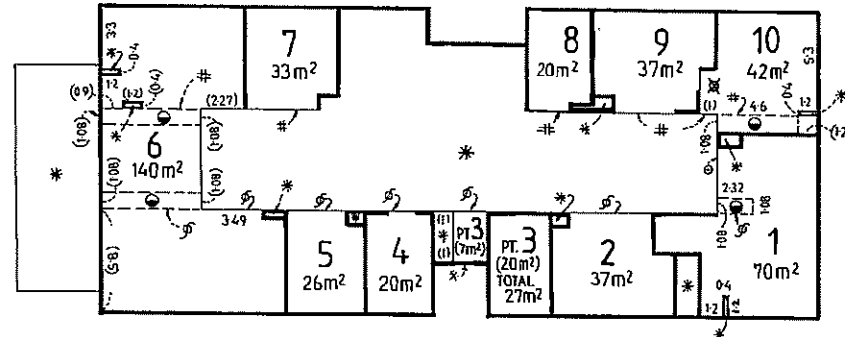
10	20	30	40	50	60	Table of mm	100	110	120	130	140	150	160
----	----	----	----	----	----	-------------	-----	-----	-----	-----	-----	-----	-----

STRATA PLAN 20206

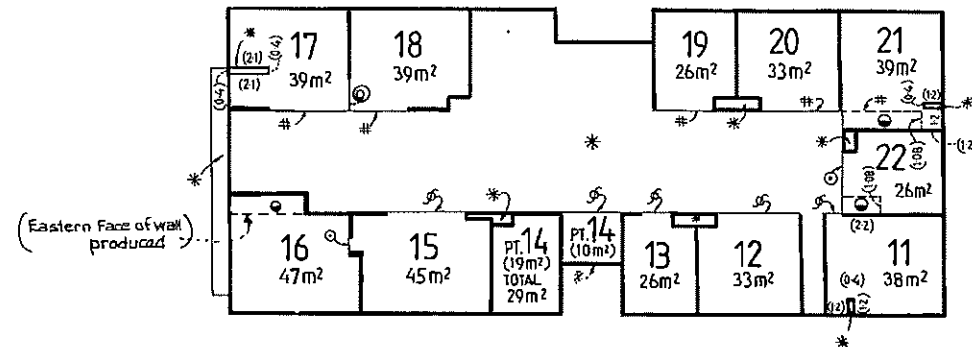
SCHEDULE OF UNIT ENTITLEMENT

LOT N°	UNIT ENTITLEMENT
1	70
2	37
3	27
4	20
5	26
6	140
7	33
8	20
9	37
10	42
11	38
12	33
13	26
14	29
15	45
16	47
17	39
18	39
19	26
20	33
21	39
22	26
AGGREGATE	872

GROUND FLOOR



FIRST FLOOR



AREAS ARE APPROXIMATE ONLY

* DENOTES COMMON PROPERTY

✱ DENOTES INSIDE FACE OF GLASS WALL

☞ DENOTES PROLONGATION OF WESTERN FACE OF WALL

DENOTES PROLONGATION OF EASTERN FACE OF WALL

☒ DENOTES PROLONGATION OF NORTHERN FACE OF WALL

● DENOTES PART LOT LIMITED IN HEIGHT TO 2.31 ABOVE THE UPPER SURFACE OF THE SLAB THEREOF

○ DENOTES PROLONGATION OF SOUTHERN FACE OF WALL

◎ DENOTES PROLONGATION OF CENTRELINE OF WALL

Reduction Ratio 1: 300

Lengths are in metres

W. H. Rein
Registered Surveyor 28.3.83

John
Council Clerk

SURVEYOR'S REFERENCE: 6269 / 8321A

COUNCIL'S CERTIFICATE The Council of the City/Municipality of <u>BANKSTOWN</u> having satisfied itself that the requirements of the Strata Titles Act, 1973 (other than the requirements for the registration of plans) have been complied with, approves of the proposed <u>strata plan of subdivision</u> illustrated herein. *Council does not object to the encroachment of the building beyond the alignment of <u>173 Bigne Street Liverpool 2170</u> *This approval is given on the condition that (a) <u>the plan is subject to the restriction on a lot referred to in section 39 of the Strata Titles Act, 1973</u> Date <u>19.11.91</u> Subdivision No. <u>100339</u> <u>C</u> Council Clerk. *Complete, or delete if inapplicable.	SURVEYOR'S CERTIFICATE IAN JAMES LACKENBY of <u>173 Bigne Street Liverpool 2170</u> a surveyor registered under the Surveyors Act, 1929, hereby certify that:- (1) any wall, the inner surface or any part of which corresponds substantially with any line shown on the accompanying floor plan as a boundary of a proposed lot, exists; (2) any floor or ceiling, the upper or under surface or any part of which forms a boundary of a proposed lot, shown in the accompanying floor plan, exists; (3) any wall, floor, ceiling or structural cubic space, by reference to which any boundary of a proposed lot shown in the accompanying floor plan is defined, exists; (4) any building containing proposed lots erected on the land shown on the accompanying location plan and each proposed lot shown on the accompanying floor plan is wholly within the perimeter of the parcel * subject to subparagraphs (a) and (b). * (a) except to the extent that the building overhangs on a public place; * (b) eaves and guttering of the building encroach on land other than a public place, in respect of which eaves and guttering an appropriate easement has been created by registered plan. (5) the survey instrument recorded in the accompanying location plan is accurate. Signature <u>[Signature]</u> Date <u>17th November 1991</u> * Delete if inapplicable † State whether dealing or plan, and quote registered number This is sheet 1 of my Plan in <u>two</u> sheets.	PLAN OF SUBDIVISION OF LOTS 3, 9, 10 & 14-18 INCLUSIVE, AND PART OF THE COMMON PROPERTY IN THE STRATA SCHEME BASED ON SP. 20206 Mun./Shire City : <u>BANKSTOWN</u> Locality : <u>BANKSTOWN</u> (E) Parish : <u>BANKSTOWN</u> County : <u>CUMBERLAND</u> Reduction Ratio 1: Lengths are in metres (M) Name of, and *address for service of notices on, the body corporate <u>THE PROPRIETORS STRATA PLAN 20206</u> *Address required on original strata plan only.	STRATA PLAN 41494 Registered : <u>[Stamp]</u> <u>25-8-1992</u> C.A. : N° <u>100339</u> OF <u>19.11.1991</u> Purpose : <u>STRATA PLAN OF SUBDIVISION</u> Ref. Map : <u>U0037-12</u> # Last Plan : <u>SP 20206</u>
Signatures, seals and statements of intention to create easements, restrictions on the use of land or positive covenants. IN PURSUANCE OF THE STRATA TITLES ACT, 1973, THE PROPRIETORS OF STRATA PLAN N° 20206 HEREBY CERTIFIES THAT IT HAS, BY THE SPECIAL RESOLUTION REFERRED TO IN SECTION 37(4)(a), AGREED TO EACH PROPOSED UNIT ENTITLEMENT AND THE PROPOSED AGGREGATE UNIT ENTITLEMENT SHOWN IN THE SCHEDULE ON WHICH THIS CERTIFICATE IS ENDORSED THE COMMON SEAL OF THE PROPRIETORS OF STRATA PLAN N° 20206 WAS HEREUNTO AFFIXED ON <u>14/10/1991</u> IN THE PRESENCE OF <u>R. J. S. L. 20206</u> BEING THE PERSON(S) AUTHORISED BY SECTION 55 OF THE STRATA TITLES ACT, 1973, TO ATTEST THE FIXING OF THE SEAL <u>[Signatures]</u> <u>[Seals: THE COMMON SEAL OF THE PROPRIETORS STRATA PLAN N° 20206, THE COMMON SEAL OF THE PROPRIETORS STRATA PLAN N° 20206, THE COMMON SEAL OF THE PROPRIETORS STRATA PLAN N° 20206]</u>			

Plan Drawing only to appear in this space

Plan Drawing only to appear in this space

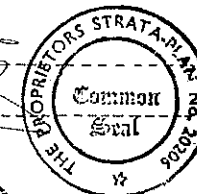
SCHEDULE OF UNIT ENTITLEMENT					
LOT N°		E'MENT	LOT N°		E'MENT
20206	1	95	SP 20206	19	26
	2	50		20	33
	4	27		21	39
	5	35		22	26
	6	190		23	32
SP	7	45	SH 4	24	35
	8	27		25	70
	11	38		26	19
	12	33		27	250
	13	26		ACCPGATE	

	*OFFICE USE ONLY
--	------------------

NOTE: • ALL AREAS ARE APPROXIMATE
• CP. DENOTES COMMON PROPERTY

IN PURSUANCE OF THE STRATA TITLES ACT, 1973, THE PROPRIETORS OF STRATA PLAN N° 20206 HEREBY CERTIFIES THAT BY A RESOLUTION, PASSED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE ACT AT A GENERAL MEETING HELD ON 11/10/1991 IT AGREED TO THE SUBDIVISION ILLUSTRATED BY THE PLAN WHICH IS IDENTIFIED BY THE SIGNATURE(S) OF THE WITNESS(ES) TO THE AFFIXING OF ITS SEAL TO THIS CERTIFICATE.

THE COMMON SEAL OF THE PROPRIETORS OF STRATA PLAN
Nº 20206 WAS HEREUNTO AFFIXED ON 4/10/1991
IN THE PRESENCE OF R. H. S. C. T. C. A.
BEING THE PERSON(S) AUTHORISED BY SECTION 55 OF THE
STRATA TITLES ACT, 1973, TO ATTEST THE FIXING OF THE SEAL



[Signature]
DIRECTOR

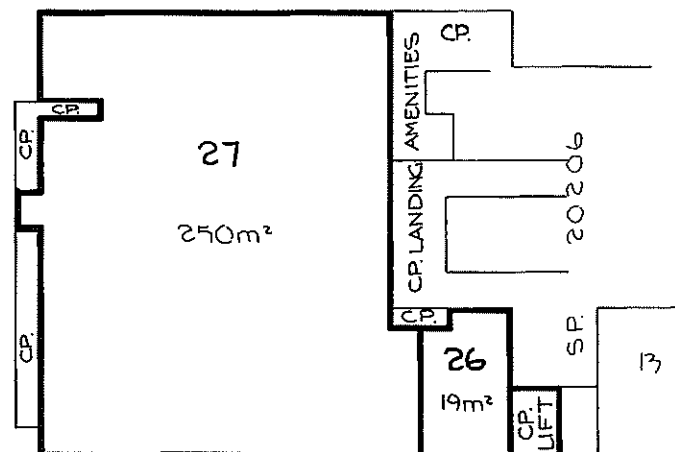
Р. В. Вина

М.Н.Д.

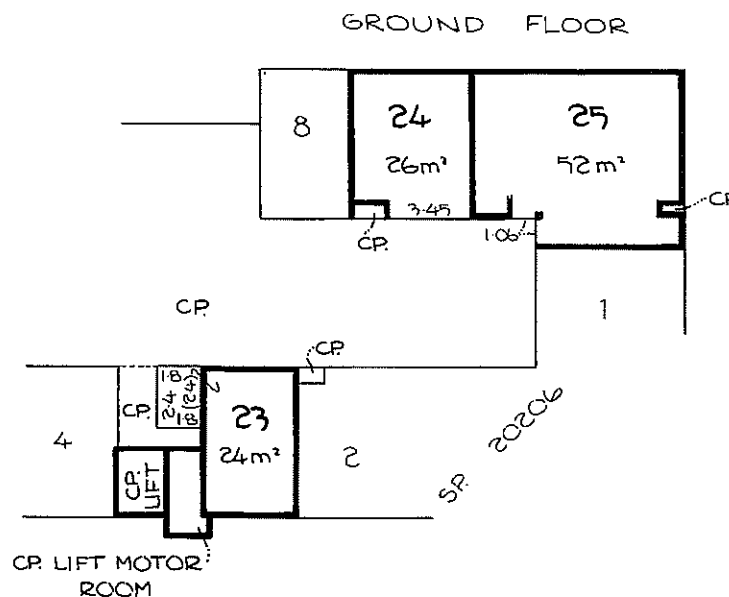
Reduction Ratio 1:200

Lengths are in metres

SURVEYOR'S REFERENCE: 52252



FIRST FLOOR



GROUND FLOOR

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPINSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/7/2015 3:12PM

FOLIO: 1/374220

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 6394 FOL 169

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
10/11/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
23/2/1996	0935987	TRANSFER	
23/2/1996	0935988	MORTGAGE	EDITION 1
4/8/1999	6066179	DEPARTMENTAL DEALING	
25/10/1999	6289388	DISCHARGE OF MORTGAGE	
25/10/1999	6289389	TRANSFER	
25/10/1999	6289390	MORTGAGE	EDITION 2
12/2/2003	9369224	DISCHARGE OF MORTGAGE	EDITION 3
16/10/2007	AD491964	TRANSFER	
16/10/2007	AD491965	MORTGAGE	EDITION 4
11/12/2007	AD625042	CAVEAT	
4/12/2008	AE367045	WITHDRAWAL OF CAVEAT	
4/9/2009	AE956455	CAVEAT	
18/11/2010	AF886564	WITHDRAWAL OF CAVEAT	
18/2/2011	AG76886	CAVEAT	
29/8/2011	AG449324	DISCHARGE OF MORTGAGE	
29/8/2011	AG449326	WITHDRAWAL OF CAVEAT	
29/8/2011	AG449327	MORTGAGE	EDITION 5
29/6/2012	AH86922	CAVEAT	
21/1/2013	AH416573	DISCHARGE OF MORTGAGE	
21/1/2013	AH416574	TRANSFER	EDITION 6

*** END OF SEARCH ***

mg

PRINTED ON 17/7/2015

*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.

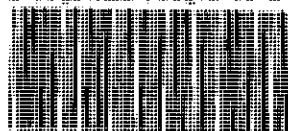
Ref:mg /Src:T
9/01/17



①

TRANSFER

Real Property Act, 1900



0
935987 D

Office of State Revenue use only

30/07/17
N.S.W. STAMP DUTY
20/07/17 04:20:10 941057

(A) LAND TRANSFERRED

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

FOLIO IDENTIFIER: 1/374220

(B) LODGED BY

L.T.O. Box 557v	Name, Address or DX and Telephone MAKINSON & D'APICE SOLICITORS LEVEL 18, 68 PITT ST. SYDNEY D.X. 298 SYDNEY. 2000 REFERENCE (max. 15 characters): 24607
------------------------	---

(C) TRANSFEROR

HARRY DOBSON FORD

(D) acknowledges receipt of the consideration of \$225,000.00

and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) subject to the following ENCUMBRANCES 1. NIL 2. 3.

(F) TRANSFEE

T	VAN XUAN HUYNH, KIM LIEN TRAN AND CHI TAI TRUONG
TENANCY:	TENANTS IN COMMON IN EQUAL SHARES

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. DATED 15.2.96

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

U. Griffith

Signature of Witness

Leonie Griffin

Name of Witness (BLOCK LETTERS)

2/19 Restwell St, Bankstown

Address of Witness

H. G. Ford

Signature of Transferor

Signed in my presence by the Transferee who is personally known to

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Solicitor for xxxxxxxx

D.P. NGUYEN Transferee

38

Form: .97-01T
Licence: 026CN/0526/96

TRANSFER

New South Wales

Real Property Act 1900

6289389Y



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

Office of State Revenue use only

21-09-1999 0900105104-001
TRANSFER - AGT FOR SALE OF LAND
DUTYABLE AMOUNT \$ *****86,666.00
DUTY \$ *****1,524.50

(A) LAND TRANSFERRED

Show no more than 20 titles.
If appropriate, specify the
share or part transferred.

1/374220

(B) LODGED BY

LTO Box

Name, Address or DX and Telephone

25G

THE MORTGAGE COMPANY

REFERENCE (15 character maximum):

(C) TRANSFEROR CHI TAI TRUONG, VAN XUAN HUYNH & KIM LIEN TRAN

(D) acknowledges receipt of the consideration of \$NIL

and as regards the land specified above transfers to the transferee an estate in fee simple.

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

(F) TRANSFEE

T
TS
(s713
LGA)
TW
(Sheriff)

VAN XUAN HUYNH & KIM LIEN TRAN

(G)

TENANCY: Joint tenants

(H) We certify this dealing correct for the purposes of the Real Property Act 1900. DATE 14/9/1999
Signed in my presence by the transferor who is personally known to me.

Signature of Witness

ANDREW THAN
Name of Witness (BLOCK LETTERS)

9 Marion St, Baulstoww
Address of Witness

Signature of Transferors

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

Signature of Witness

ANDREW THAN
Name of Witness (BLOCK LETTERS)

9 Marion St, Baulstoww
Address of Witness

Signature of the Transferees

NB: if signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name in block letters.

Form: 01T
Licence: 01-05-025
Licensee: LEAP Legal Software Pty Limited
Firm name: Peter Zipkis & Associates

TRANSFER



New South Wales
Real Property Act 1900

AD491964M

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 68B 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

NSW Treasury 12/10/07
Client No: 1411509 1404
Duty: 2 Trans No: 4621457
Asst details:

(A) TORRENS TITLE

If appropriate, specify the part transferred
1/374220

(B) LODGED BY

Delivery Box	Name, Address or DX and Telephone	CODES
48T	LLPN: 123819E CITYLINK Reference (optional): KS/376216/K. NEWHAM	T TW (Sheriff)

(C) TRANSFEROR

Van Xuan HUYNH and Kim Lien TRAN

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$600,000.00 and as regards the land specified above transfers to the transferee an estate in fee simple.

(E) ESTATE

(F) SHARE

TRANSFERRED

(G)

Encumbrances (if applicable):

(H) TRANSFEREE

Safety Scene Pty Ltd ACN 091 785 643

(I)

TENANCY:

DATE

12/10/07

(J) 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:

Address of witness:

CHI CHAN
1/36-38 Canley Vale Rd
Canley Vale NSW 2166

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

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:

Signatory's capacity:

Peter Zipkis

Solicitor for the Transferee



Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPINSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/374220

SEARCH DATE	TIME	EDITION NO	DATE
17/7/2015	3:09 PM	6	21/1/2013

LAND

LOT 1 IN DEPOSITED PLAN 374220
LOCAL GOVERNMENT AREA BANKSTOWN
PARISH OF BANKSTOWN COUNTY OF CUMBERLAND
TITLE DIAGRAM DP374220

FIRST SCHEDULE

HANSEN BESLICH NOMINEES PTY LIMITED

(T AH416574)

SECOND SCHEDULE (1 NOTIFICATION)

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 17/7/2015

*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.

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPINSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/7/2015 3:13PM

FOLIO: 1/374219

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 6394 FOL 172

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
10/11/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
27/3/1991	Z561479	DISCHARGE OF MORTGAGE	EDITION 1
1/8/1991	Z820462	CHANGE OF NAME	
1/8/1991	Z820463	MORTGAGE	EDITION 2
30/8/1994	U572988	DISCHARGE OF MORTGAGE	
30/8/1994	U572989	MORTGAGE	EDITION 3
24/10/1996	2560234	DISCHARGE OF MORTGAGE	EDITION 4
8/8/1997	3303229	TRANSFER	
8/8/1997	3303230	MORTGAGE	EDITION 5
21/7/1999	6010803	DEPARTMENTAL DEALING	
4/12/2001	8172244	DISCHARGE OF MORTGAGE	
4/12/2001	8172245	MORTGAGE	EDITION 6
6/3/2002	8414019	DISCHARGE OF MORTGAGE	
6/3/2002	8414020	TRANSFER	
6/3/2002	8414021	MORTGAGE	EDITION 7
16/9/2003	9975132	DISCHARGE OF MORTGAGE	
16/9/2003	9975133	MORTGAGE	EDITION 8
10/12/2007	AD623236	DISCHARGE OF MORTGAGE	
10/12/2007	AD623237	TRANSFER	
10/12/2007	AD623238	MORTGAGE	EDITION 9
11/12/2007	AD625042	CAVEAT	
4/12/2008	AE367045	WITHDRAWAL OF CAVEAT	
4/9/2009	AE956455	CAVEAT	

END OF PAGE 1 - CONTINUED OVER

mg

PRINTED ON 17/7/2015

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH
-----SEARCH DATE

17/7/2015 3:13PM

FOLIO: 1/374219

PAGE 2

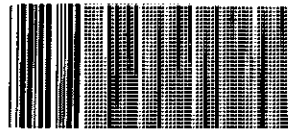
Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
18/11/2010	AF886564	WITHDRAWAL OF CAVEAT	
18/2/2011	AG76886	CAVEAT	
29/8/2011	AG449325	DISCHARGE OF MORTGAGE	
29/8/2011	AG449326	WITHDRAWAL OF CAVEAT	
29/8/2011	AG449327	MORTGAGE	EDITION 10
29/6/2012	AH86922	CAVEAT	
21/1/2013	AH416573	DISCHARGE OF MORTGAGE	
21/1/2013	AH416574	TRANSFER	EDITION 11

*** END OF SEARCH ***

Form: 97-01T
Licence: MID/0734/97

TRANSFER

New South Wales
Real Property Act 1900



3303229 A

Office of State Revenue use only

00.73

50/77600ET02 70 8252 262091

N.S.W. - M.S. - STAMP DUTY

(A) **LAND TRANSFERRED**

If appropriate, specify the share or part transferred.

FOLIO IDENTIFIER 1/374219

(B) **LODGED BY**

LTO Box

45A

Name, Address or DX and Telephone

NATIONAL AUSTRALIA BANK LIMITED
NATIONAL AUSTRALIA BANK HOUSE,
GUY RD STREET, SYDNEY
2007-1111

Reference (15 character max):

NN3401

(C) **TRANSFEROR**

CHARBEL TANNOUS AND ANGEIL TANNOUS

(D) acknowledges receipt of the consideration of \$214,000.00 and as regards the land specified above transfers to the transferee an estate in fee simple.

(E) Encumbrances (if applicable):

(F) **TRANSFEE**

T
TS
(s713 LGA)
TW
(Sheriff)

NGOC TINH VU AND THI NGA VU

TENANCY: JOINT TENANTS

(H) We certify this dealing correct for the purposes of the Real Property Act 1900. DATE 1/8/97

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

Signature of Witness

PETER ERMAN

Name of Witness (BLOCK LETTERS)

Solicitors Bankstown

Address of Witness

ANGEL Tannous

Charbel Tannous

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

Solicitor for Signature of Transferee
Dina Vavitsas

Ref:mg /Src:T

Form: 01T

Licence: 01-08-067

Licensee: Midware Systems

Kells The Lawyers

TRANSFER

New South Wales
Real Property Act 1900



8414020J

PRIVACY NOTE: this information is legally required and will

STAMP DUTY

Office of State Revenue use only

NEW SOUTH WALES DUTY

19-02-2002

0000895820-001

SECTION 18(2)

DUTY

\$ *****2.00

(A) TORRENS TITLE

If appropriate, specify the part transferred

Folio Identifier 1/374219

(B) LODGED BY

Delivery
Box

Name, Address or DX and Telephone

NATIONAL AUSTRALIA BANK

197 Prospect Highway

Seven Hills NSW 2147

Reference (optional) 45A Fax: 8825 0404



02 GO 1002

CODE

T

TW

(Sheriff)

(C) TRANSFEROR

NGOC TINH VU & THI NGA VU

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 330,000.00

and as regards

(E) ESTATE

the land specified above transfers to the transferee an estate in fee simple.

(F) SHARE

TRANSFERRED

(G)

Encumbrances (if applicable):

(H) TRANSFEE

KEVIN EMANUEL ZAMMITT and DAVID WING CHEUNG MANN

(I)

TENANCY: Tenants in Common in Equal Shares

(J) DATE

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 transferor.

Signature of witness:

Name of witness:

TINA DUONG

Address of witness:

9 MARION ST, BANKSTOWN

Signature of transferor:

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: MARIO QUINTILIANI

Signatory's capacity: Solicitor for the transferee

Form: 01T
Release: 3.4
www.lands.nsw.gov.au

1

TRANSFER

New South Wales
Real Property Act 1900



AD623237Q

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

NEW SOUTH WALES DUTY

05-12-2007

0004732633-001

TRANSFER- TRANSFER

DUTYABLE AMOUNT \$ *****350,000.00

(A) FOLIO OF THE REGISTER

FOLIO IDENTIFIER 1/374219

DUTY

*****11,290.00

(B) LODGED BY

Document Name Address or DX, Telephone, and LLPN if any

108G
Company
Box

LLPN:
123843H ESPREON
PROPERTY SERVICES
DX 885 SYDNEY
02 9210 0993

CODES

T
TW
(Sheriff)

Reference:

20-5578059

(C) TRANSFEROR

KEVIN EMANUEL ZAMMITT and DAVID WING CHEUNG MANN

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 350,000.00 and as regards

(E) ESTATE

the above folio of the Register transfers to the transferee an estate in fee simple

(F) SHARE

TRANSFERRED

(G)

Encumbrances (if applicable):

(H) TRANSFEREE

SAFETY SCENE PTY LIMITED (ACN 091 785 643)

(I)

TENANCY:

DATE

(J) 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 transferor.

Signature of witness:

THOMAS HOUARY BRAY
SUITE 1 LEVEL 5
321 PITT STREET
SYDNEY NSW 2000

Name of witness:

Address of witness:

Signature of transferor:

[Signature of David Mann]

Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: SAFETY SCENE PTY LIMITED

Authority: Section 127 CORPORATIONS ACT 2001

Signature of authorised person:

TRACY ZAMMITT
DIRECTOR

Signature of authorised person:

DAVID MANN
DIRECTOR

Name of authorised person:

Office held:

Name of authorised person:

Office held:



Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPI/NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/374219

SEARCH DATE	TIME	EDITION NO	DATE
17/7/2015	3:09 PM	11	21/1/2013

LAND

LOT 1 IN DEPOSITED PLAN 374219
LOCAL GOVERNMENT AREA BANKSTOWN
PARISH OF BANKSTOWN COUNTY OF CUMBERLAND
TITLE DIAGRAM DP374219

FIRST SCHEDULE

HANSEN BESLICH NOMINEES PTY LIMITED (T AH416574)

SECOND SCHEDULE (1 NOTIFICATION)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

mg

PRINTED ON 17/7/2015

*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.

NEW SOUTH WALES

CERTIFICATE OF TITLE

PROPERTY ACT, 1900



13218228

Appln. No.13949
Prior Titles:
Vol.4708 Fol. 47 Vol.7361 Fol. 40
Vol.6394 Fol.170 Vol.7363 Fol.184
Vol.6394 Fol.173

Vol. **13218** Fol. **228**

EDITION ISSUED

5 | 1977



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.

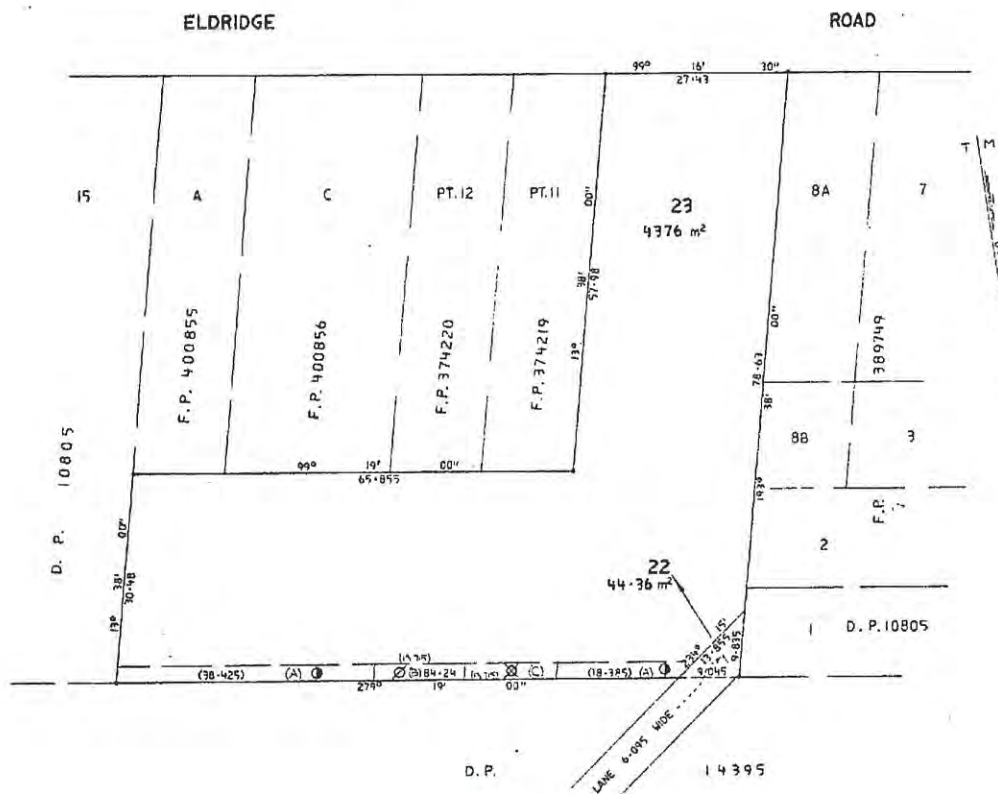
Jaworski
Registrar General.



PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES

CANCELLED



- (A) DRAINAGE EASEMENT 2.44 METRES WIDE
(B) DRAINAGE EASEMENT 2.44 METRES WIDE
CREATED BY C58064
(C) DRAINAGE EASEMENT 2.44 METRES WIDE
CREATED BY C58065

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 23 in Deposited Plan 586972 at Bankstown in the Municipality of Bankstown Parish of Bankstown and County of Cumberland being part of Portion 51 granted to George Morris on 19-10-1831.

FIRST SCHEDULE

~~THE COUNCIL OF THE MUNICIPALITY OF BANKSTOWN.~~

SECOND SCHEDULE

- Reservations and conditions, if any, contained in the Crown Grant above referred to.
- Easement for Drainage created by Transfer No.C58064 affecting the part of the land above described 2.44 wide designated (B) in the plan hereon.
- Easement for Drainage created by Transfer No.C58065 affecting the part of the land above described 2.44 wide designated (C) in the plan hereon.
- Easement for Drainage affecting the part of the land above described 2.44 wide designated (A) in the plan hereon created by the registration of Deposited Plan 586972. See P968928.

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

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TILES OFFICE.

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

REGISTERED PROPRIETOR

[illegible]

NEW CERTIFICATE(S) OF TITLE ISSUING ON 22611213
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO
SURVEY DRAFTING BRANCH.

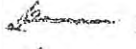
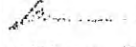
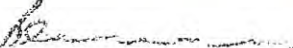
INSTRUMENT	
NATURE	NUMBER

[illegible]

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

Req:R9448869 / Doc:CT 13218-228 CT / Rev:10-Jan-2011 / Sts:OK.SC / Prc:17-Jul-2015 15:21 / Pgs:ALL / Seq:2 of 6
Ref:mg / Src:TL

SECOND SCHEDULE (continued)

OF PART OF THE PREMISES KNOWN AS				14 ELDRIIDGE ROAD, BANKSTOWN.	TOGETHER WITH AND RESERVING RIGHTS.			
INSTRUMENT		SUITE.	FLOOR.	LESSEES	DATE OF EXPIRY	REGISTERED	Signature of Registrar General	CANCELLATION
NATURE	NUMBER							
Lease	R574749	U.	1st.	to Lucas Souvlis of Centennial Park, Medical Practitioner. Together with Option of Renewal.	2-4-1981.	17-3-1980.		
Lease	R574750	G.	Ground.	to Tanondi Pty. Limited. Together with Option of Renewal.	11-2-1981.	17-3-1980.		
Lease	R574751	F.	Ground.	to Rafe Enterprises Pty. Limited. Together with Option of Renewal.	11-2-1981.	17-3-1980.		
Lease	R574752	C.	Ground.	to Weyitin Finance Pty. Limited.	14-9-1988.	17-3-1980.		
Lease	R574753	V.	1st.	to Graeme Windrum, Thelma Hunt, Paul Lamond, John Baird and David White, all of Surry Hills, Pathologists, as joint tenants. Together with Option of Renewal.	5-6-1983.	17-3-1980.		
Lease	R574754	--	--	to The Sydney County Council of Substation premises No. 5006 as shown in plan with R574754, Together with Right of Way and Easement for electricity purposes over another part of the land within described.	17-10-2006.	17-3-1980.		
This deed is cancelled as to <u>whole ex Road</u> New certificates of Title have issued on <u>4.3.1981</u> for lots in <u>Deposited</u> Plan No <u>611213</u> as follow:- Lots <u>123-124</u> Vol. <u>14343</u> Fol. <u>14-15</u> respectively.  REGISTRAR GENERAL The residue of land in the <u>Road Widening in DP 611213</u>  REGISTRAR GENERAL								

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

SECOND SCHEDULE (continued)

OF PART OF THE PREMISES KNOWN AS				TOGETHER WITH AND RESERVING RIGHTS.				
INSTRUMENT		SUITE.	FLOOR.	LESSEES	DATE OF EXPIRY	REGISTERED	Signature of Registrar General	CANCELLATION
NATURE	NUMBER							

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

Page 5

NEW SOUTH WALES

Appln. No.13949

Prior Title Vol.13218 Fol.228

CERTIFICATE OF TITLE

REAL PROPERTY ACT, 1900



14343014

Vol. 14343 Fol. 14



CANCELLED

EDITION ISSUED

5 3 1981

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.

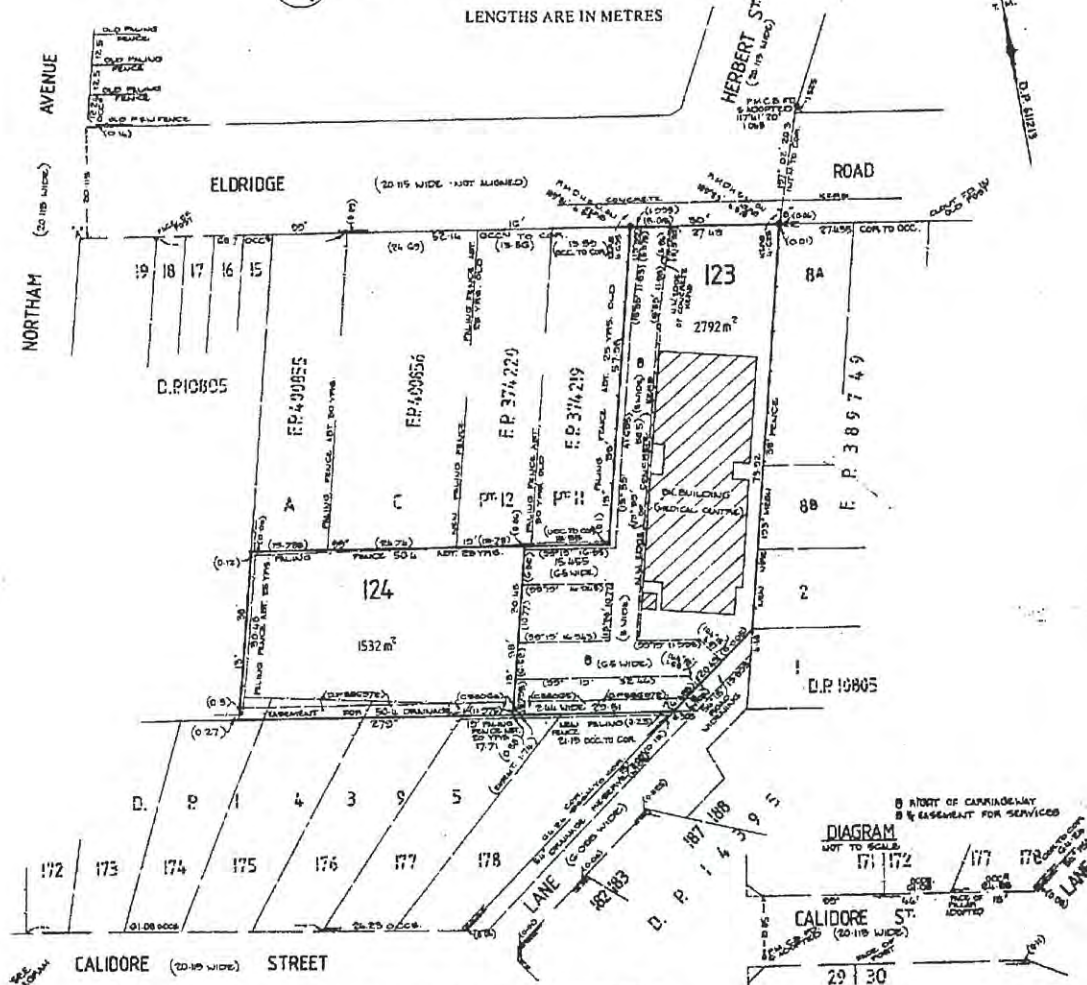
[Signature]

Registrar General.



PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 123 in Deposited Plan 611213 at Bankstown in the City of Bankstown Parish of Bankstown and County of Cumberland being part of Portion 51 granted to George Morris on 19-10-1831.

FIRST SCHEDULE

GRIFFITHS BROS., INVESTMENTS PTY. LIMITED.

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. C58064 Easement for drainage affecting the part of the land above described shown so burdened in the plan hereon.
3. C58065 Easement for drainage affecting the part of the land above described shown so burdened in the plan hereon.
4. DP586972 Easement for drainage affecting the part of the land above described shown so burdened in the plan hereon. See P968928.
5. R467705 Mortgage to Australian European Finance Corporation Limited.
6. DP611213 Right of carriageway affecting the part of the land above described shown so burdened in the plan hereon.
7. DP611213 Easement for services affecting the part of the land above described shown so burdened in the plan hereon.

REGISTERED PROPRIETOR

[illegible]

INSTRUMENT

[illegible]

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

SECOND SCHEDULE (continued)

OF PART OF THE PREMISES KNOWN AS

14 ELDRIDGE ROAD, BANKSTOWN.

INSTRUMENT		SUITE	FLOOR	LESSEES	DATE OF EXPIRY	REGISTERED	Signature of Registrar General	CANCELLATION
NATURE	NUMBER							
Lease	R574749	U.	1st	to Lucas Souvlis of Centennial Park, Medical Practitioner. Together with option of renewal.	2-4-1981	17-3-1980		Cancelled T542781
Lease	R574750	G.	Ground	To Tanondi Pty. Limited. Together with option of renewal.	11-2-1981	17-3-1980		Expired T542781
Lease	R574751	F.	Ground	to Rafe Enterprises Pty. Limited. Together with option of renewal.	11-2-1981	17-3-1980		Expired T542781
Lease	R574752	C.	Ground	to Weyitin Finance Pty. Limited.	14-9-1988	17-3-1980		Expired T542781
Lease	R574753	V.	1st	to Graeme Windrum, Thelma Hunt, Paul Lamond, John Baird and David White, all of Surry Hills, Pathologists, as joint tenants. Together with option of renewal.	5-6-1983	17-3-1980		
Lease	R574754	---	---	to The Sydney County Council of Substation premises No.5006 as shown in plan with R574754, together with Right of Way and Easement for electricity purposes over another part of the land within described.	17-10-2006	17-3-1980		
Lease	R997193			to Chutti Pty. Limited, together with option to purchase.	22-4-1985	12-3-1981		Cancelled T542781

This deed is cancelled as to Whole
 New Certificates of Title have issued on 2-6-1983
 for lots in Strata Plan No. 20206 as follows:-
 Lots 1 to 22 Vol. 15065 Fol. 113/135 respectively.
Common Property Vol. 15065 Fol. 113.

REGISTRAR GENERAL



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

R997193
 (DATE COMPLETED)
 (Page

T542781 Reg
 S.P. 20206

SECOND SCHEDULE (continued)

INSTRUMENT		LESSEES	DATE OF EXPIRY	REGISTERED	Signature of Registrar General	CANCELLATION
NATURE	NUMBER					

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

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

NEW SOUTH WALES

CERTIFICATE OF TITLE

REAL PROPERTY ACT, 1900

TORRENS TITLE

Register
CANCELLED

15065 113

Vol. Fol.

First Title : Old System OS

Prior Title : Vol.14343 Fol.14



SEE AUTO FOLIO
EDITION 3 6 1983
ISSUED

I certify that **The Proprietors - Strata Plan No. 20206** is the registered proprietor of an estate in fee simple (or such other estate or interest as is set out below) in the common property in the strata scheme relating to the Strata Plan so numbered, within the land described, subject to the recordings hereon and to the provisions of the Real Property Act, 1900.

S

[Signature]

Registrar General.



ADDRESS FOR SERVICE OF NOTICES 14 ELDRIDGE ROAD, BANKSTOWN 2200.

LAND REFERRED TO Lot 123 in Deposited Plan 611213 at Bankstown in the City of Bankstown Parish of Bankstown and County of Cumberland.

RECORDINGS

1. Reservations and conditions, if any, contained in the Crown Grant.
2. **C58064 Easement for drainage** affecting the part of the land above described shown so burdened in Strata Plan 20206.
3. **C58065 Easement for drainage** affecting the part of the land above described shown so burdened in Strata Plan 20206.
4. **DP586972 Easement for drainage** affecting the part of the land above described shown so Burdened in Strata Plan 20206. See P968928.
5. **DP611213 Right of carriageway** affecting the part of the land above described shown so burdened in Strata Plan 20206. Released V249054
6. **DP611213 Easement for services** affecting the part of the land above described shown so burdened in Strata Plan 20206. Released V249054
7. **R574754 Lease to The Sydney County Council of Substation premises No.5006** as shown in Plan with R574754, together with Right of way and Easement for electricity purposes over another part of the land within described. Expires 17-10-2026

SCHEDULE OF UNIT ENTITLEMENT

Aggregate unit entitlement: 872

Lot No.	Strata Plan No.	Unit Entitlement
1	20206	70
2	"	37
3	"	27
4	"	20
5	"	26
6	"	140
7	"	33
8	"	20
9	"	37
10	"	42
11	"	38
12	"	33
13	"	26
14	"	29
15	"	45
16	"	47
17	"	39
18	"	39
19	"	26
20	"	33
21	"	39
22	"	26

15065113



Ref:mg /Src:1

Reg:R944791 /Doc:CT 15065-113 CT /Rev:07-Mar-2011 /Sts:OK.SC /Prt:17-Jul-2015 15:15 /Pg:ALT /Seq:1 of 2

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

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

RECORDINGS (continued)

PARTICULARS

Registrar General

CANCELLATION

NOTATIONS AND UNREGISTERED DEALINGS

V249054
0305 07
DECS & PLANE
40 SEP30
WH562A2X
/ 10000 HIGH
HUTCH AUL
HUTCH AUL
HUTCH AUL

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

Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General.

Information provided through Tri-Search an approved LPINSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

17/7/2015 3:15PM

FOLIO: CP/SP20206

First Title(s): OLD SYSTEM

Prior Title(s): VOL 15065 FOL 113

Recorded	Number	Type of Instrument	C.T. Issue
29/4/1986		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
11/6/1986		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
31/8/1992	E669417	TRANSFER	
31/8/1992	SP41494	STRATA PLAN	EDITION 1
3/1/2002	8243319	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 2
19/10/2006	AC679767	DEPARTMENTAL DEALING	
27/6/2012	AH75872	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 3

*** END OF SEARCH ***

mg

PRINTED ON 17/7/2015

*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.

RP13



TRANSFER

Real Property Act 1900

1861/62



E

669417 E

Office



OFFICE OF STATE REVENUE P9
STAMP DUTY 1992/93

DUTY \$25-00

1ST REC NO 400754231

D

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

CP/SP20206 - PART LOT 27 SP41494 COMPRISING THE
PART FORMERLY BEING COMMON PROPERTY.

(B) **LODGED BY**

L.T.O. Box

669J

Name, Address or DX and Telephone

PARRY CARROLL KANJIAN

Level 15, 111 Elizabeth Street

SYDNEY NSW 2000

DX 608 SYDNEY

REFERENCE (max. 15 characters): 3/A206

(C) **TRANSFEROR**

THE PROPRIETORS OF STRATA PLAN 20206

(D) acknowledges receipt of the consideration of \$2,000.00

and as regards the land specified above transfers to the transferee an estate in fee simple

(E) subject to the following ENCUMBRANCES 1. 2. 3.

(F) **TRANSFEEE**



AMERCANT TRADING PTY LIMITED

as joint tenants/tenants in common

(H) We certify this dealing correct for the purposes of the Real Property Act, 1900. DATE OF EXECUTION 27 July 1992

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

The Common Seal of the Proprietors Strata Plan 20206 was hereunto affixed in the

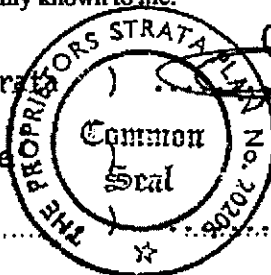
Signature of Witness

presence of:

Name of Witness (BLOCK LETTERS)

Address of Witness

352 STACKY ST
BANKSTOWN 2200



Signature of Transferor

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

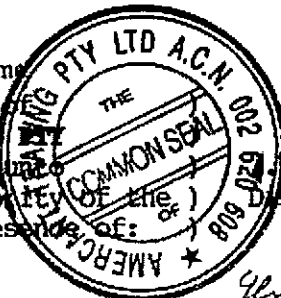
THE COMMON SEAL
AMERCANT TRADING
PTY LIMITED

Signature of Witness

was hereunto affixed by authority of the Board in the presence of:

Name of Witness (BLOCK LETTERS)

Address of Witness



Signature of Transferee
Secretary



E

669417

FORM 11

Strata Titles Act 1973

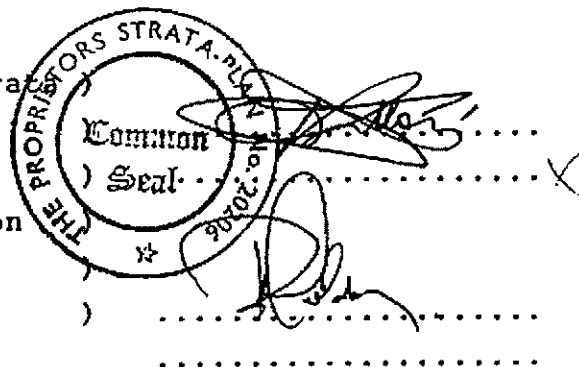
CERTIFICATE OF BODY CORPORATE

In pursuance of the Strata Titles Act, 1973, The Proprietors - Strata Plan 20206 hereby certifies that:-

- (1) Strata Plan 41494, a copy of which is attached, was sealed by it pursuant to a unanimous resolution passed in accordance with the requirements of the above Act;
- (2) The requirements of section 28(3)(a)(ii) of the above Act have been complied with in respect of the said plan.

DATED: 27th.day of July 1992

The common seal of The Proprietors - Strata Plan 20206 was hereunto affixed on in the presence of being the person(s) authorised by Section 55 of the Strata Titles Act, 1973, to attest the affixing of the seal



Legal Liaison Services hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act.

Information provided through Tri-Search an approved LPINSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: CP/SP20206

SEARCH DATE	TIME	EDITION NO	DATE
17/7/2015	3:09 PM	3	27/6/2012

LAND

THE COMMON PROPERTY IN THE STRATA SCHEME BASED ON STRATA PLAN 20206
WITHIN THE PARCEL SHOWN IN THE TITLE DIAGRAM

AT BANKSTOWN
LOCAL GOVERNMENT AREA BANKSTOWN
PARISH OF BANKSTOWN COUNTY OF CUMBERLAND
TITLE DIAGRAM SHEET 1 SP20206

FIRST SCHEDULE

THE OWNERS - STRATA PLAN NO. 20206

ADDRESS FOR SERVICE OF NOTICES:

14 ELDRIDGE ROAD
BANKSTOWN 2200

SECOND SCHEDULE (7 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 ATTENTION IS DIRECTED TO BY-LAWS SET OUT IN SCHEDULE 1 STRATA SCHEMES MANAGEMENT ACT 1996
- 3 C58064 EASEMENT FOR DRAINAGE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 4 C58065 EASEMENT FOR DRAINAGE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 5 DP586972 EASEMENT FOR DRAINAGE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 6 R574754 LEASE TO THE SYDNEY COUNTY COUNCIL OF SUBSTATION PREMISES NO.5006 TOGETHER WITH RIGHT OF WAY AND EASEMENT FOR ELECTRICITY PURPOSES. EXPIRES 17-10-2026
- 7 AH75872 THIS EDITION ISSUED PURSUANT TO S.111 REAL PROPERTY ACT, 1900

SCHEDULE OF UNIT ENTITLEMENT (AGGREGATE: 1096)

STRATA PLAN 20206

LOT	ENT	LOT	ENT	LOT	ENT	LOT	ENT
1	- 95	2	- 50	3	- SP41494	4	- 27
5	- 35	6	- 190	7	- 45	8	- 27
9	- SP41494	10	- SP41494	11	- 38	12	- 33
13	- 26	14	- SP41494	15	- SP41494	16	- SP41494
17	- SP41494	18	- SP41494	19	- 26	20	- 33

END OF PAGE 1 - CONTINUED OVER

mg

PRINTED ON 17/7/2015

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH
-----FOLIO: CP/SP20206

PAGE 2

SCHEDULE OF UNIT ENTITLEMENT (AGGREGATE: 1096) (CONTINUED)

STRATA PLAN 20206

LOT	ENT	LOT	ENT	LOT	ENT	LOT	ENT
21	- 39	22	- 26				

STRATA PLAN 41494

LOT	ENT	LOT	ENT	LOT	ENT	LOT	ENT
23	- 32	24	- 35	25	- 70	26	- 19
27	- 250						

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Appendix F

Section 149 Certificates



PLANNING CERTIFICATE
UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Hansen Yuncken Pty Ltd
TO BE COLLECTED

CERTIFICATE DETAILS

NUMBER	20151290	DATE	19-Mar-2015
--------	----------	------	-------------

RECEIPT AND REFERENCE DETAILS

FEE	\$133.00		
RECEIPT NUMBER	3021984	RECEIPT DATE	17-Mar-2015
REFERENCE	0434367611		

PROPERTY DESCRIPTION

PROPERTY	1 / 14 Eldridge Road, BANKSTOWN NSW 2200		
TITLE	Lot 1 SP 20206		
PARISH	Bankstown	COUNTY	CUMBERLAND

PLANNING INSTRUMENTS

In accordance with Section 149(2) and at the date of this certificate the following Environmental Planning Instruments apply to the land.

Bankstown Local Environmental Plan 2015 Gazetted on 05-Mar-2015

LAND ZONING

SP2 Infrastructure: Health Services Facility



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

SECTION 149(2) DETAILS

In accordance with section 149(2) of the Environmental Planning and Assessment Act 1979 (as amended) and at the date of this certificate, the following prescribed matters relate to the land.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

Affected by Bankstown Local Environmental Plan 2015 Amendments and Planning Proposals in respect of general information as detailed in Appendix 1.

Affected by State Environmental Planning Policies (SEPP's), Proposed State Environmental Planning Policies and Deemed State Environmental Planning Policies as detailed in Appendix 2.

Affected by Bankstown Development Control Plan 2014 (refer to Appendix 3 which lists the contents chapters within the DCP).

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Unless specified otherwise in this section of the certificate, the land does not include or comprise critical habitat, is not in a conservation area and has no environmental heritage item on the land.

The purposes for which the plan or instrument provides that development may be carried out within the zone without the need for development consent are specified in clause 3.1 of the LEP 2015 plan and the land use table as detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development may not be carried out within the zone except with development consent are specified in Part 2 and clause 3.2 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development is prohibited within the zone are specified in Part 2 and clauses 4.1A-2(c), 4.1B-2(4), 6.6 and 6.8 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

Unless specified otherwise in this section of the certificate, the land is not within any zone or land use under a Precinct Plan, a proposed Precinct Plan or Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

3. COMPLYING DEVELOPMENT

General Housing Code

Complying development under the General Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- B5 Business Development, B6 Enterprise Corridor, B7 Business Park
- IN1 General Industrial, IN2 Light Industrial
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one or more of the following 4 exemptions:-

- A Heritage item refer to clause 2 of this certificate,
- Land in the 25 or higher ANEF contour refer to clause 7 of this certificate,
(Unless the development is only for the erection of ancillary development, the alteration of or an addition to ancillary development or the alteration of a dwelling house)
- Acid sulfate soils class 1 or 2 refer to clause 7 of this certificate,
- Land in a vegetated buffer area refer to clause 7 of this certificate.

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

Housing Alterations Code

Complying development under the Housing Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- B5 Business Development, B6 Enterprise Corridor, B7 Business Park
- IN1 General Industrial, IN2 Light Industrial
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by the following exemption:-

- A Heritage itemrefer to clause 2 of this certificate.

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

Subdivisions Code (strata subdivision)

Complying development under the Subdivisions Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- B1 Neighbourhood Centre, B2 Local Centre, B4 Mixed Use, B5 Business Development, B6 Enterprise Corridor, B7 Business Park
- IN1 General Industrial, IN2 Light Industrial
- SP1 Special Activities, SP2 Infrastructure



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one or more of the following 4 exemptions:-

- A Heritage item refer to clause 2 of this certificate,
- Land in the 25 or higher ANEF contour..... refer to clause 7 of this certificate,
(Unless the development is only for the erection of ancillary development, the alteration of or an addition to ancillary development or the alteration of a dwelling house)
- Acid sulfate soils class 1 or 2 refer to clause 7 of this certificate,
- Land in a vegetated buffer area refer to clause 7 of this certificate,

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

General Development Code

Complying development under the General Development Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Demolition Code

Complying development under the Demolition Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Commercial and Industrial Alterations Code

Complying development under the Commercial and Industrial Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots
- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- A Flood Control Lotrefer to clause 7A of this certificate.

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

Further: Although the land is non complying for Subdivisions 9 & 10, the Code may render the land complying for Subdivisions 1-8 and 11-12. Reference should be made to "Part 5 – Commercial and Industrial Alterations Code" of the SEPP for details.

Commercial and Industrial (New Buildings and Additions) Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots

BANKSTOWN CITY COUNCIL

PO Box 8, Bankstown NSW 1885 PH 02 9707 9999 FAX 02 9707 9957



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- Acid Sulfate Soils class 1 or 2refer to clause 7 of this certificate
- A Vegetated Buffer Area.....refer to clause 7 of this certificate

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

4. COASTAL PROTECTION

Unless specified otherwise in this section of the certificate, the land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act 1979.

4A. CERTAIN INFORMATION RELATING TO BEACHES AND COASTS

Unless specified otherwise in this section of the certificate, the land is not subject to an order under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (or on public land adjacent to the land) and, Council has not been notified under Section 55X of the Coastal Protection Act 1979 that temporary coastal protection works have been placed on the land (or on public land adjacent to the land).

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

Unless specified otherwise in this section of the certificate, the owner (or any previous owner) has not consented in writing that the land is subject to annual charges under Section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works.

5. MINE SUBSIDENCE

Not affected by Section 15 of the Mine Subsidence Compensation Act 1961, proclaiming land to be a mine subsidence district.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

6. ROAD WIDENING AND REALIGNMENT

Not affected by any road widening or road realignment under (1) Division 2 of part 3 of the Roads Act 1993; or (2) any Environmental Planning Instrument; or (3) any resolution of Council. However, should your property be near an arterial or main road you should check with the Roads and Maritime Services for possible affectations.

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

Unless specified otherwise in this section of the certificate, the land is not affected by policies adopted by Council or by any other authority (that has notified Council of its adoption) that restricts development of the land. For bush fire prone land refer to section 11. For flood prone land refer to section 7A.

Affected by a resolution of Council adopting a policy concerning the management of contaminated land. That policy applies to all land in the City of Bankstown and will restrict development of the land if the circumstances set out in the policy prevail. A copy of the policy is available on Council's website at www.bankstown.nsw.gov.au or from the Customer Service Area.

Note: Additional information regarding contaminated land matters for this property may also be provided on part 5 of this section 149 planning certificate. For further information contact Council on Ph.97079999.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

Unless specified otherwise in this section of the certificate, the land is not affected by flood related development controls.

A Flood control lot.

The property is affected by a policy known as Bankstown Development Control Plan 2014, Part B12 - Flood Risk Management and clause 6.3 – Flood planning of the LEP 2015, by reference to the Salt Pan Creek Stormwater Catchment Study (June 2007) and Report Addendum (October 2009) (a copy of which is available for inspection at Council's Offices), which categorises land affected by the 100 year flood into two flood risk precincts:

- High flood risk precinct – Land below the 100 year flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties; and
- Medium flood risk precinct - Land below the 100 year flood that is not subject to a high hydraulic hazard and where there are no evacuation difficulties.

Bankstown Development Control Plan 2014 includes flood related development controls for properties based on the relevant flood risk precinct. Contact Council for information about the flood risk precinct applying to this property.

8. LAND RESERVED FOR ACQUISITION

Not affected by either an Environmental Planning Instrument or proposed Environmental Planning Instrument referred to in clause 5.1 providing for the acquisition of the land or part of the land by a public authority, as referred to in Section 27 of the Environmental Planning & Assessment Act. Reference should be made to the LEP 2015 plan as a whole for details.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

9. CONTRIBUTION PLANS

Affected by Bankstown City Council Section 94A Development Contributions Plan 2009 which allows Council to impose a levy on development within the City of Bankstown in accordance with Directions issued by the Minister for Planning. The levy will be spent on the provision of public works and infrastructure. Date of commencement 8th June 2009. For further details on the plan contact Council on 9707 9999 or visit Council's website – www.bankstown.nsw.gov.au

9A. BIODIVERSITY CERTIFIED LAND

Unless specified otherwise in this section of the certificate, the land is not biodiversity certified land within the meaning of Part 7AA of the Threatened Species Conservation Act 1995.

10. BIOBANKING AGREEMENTS

Unless specified otherwise in this section of the certificate, the land is not subject to a Biobanking Agreement under Part 7A of the Threatened Species Conservation Act 1995, made by the Department of Environment, Climate Change and Water that has notified Council of the existence of the agreement.

11. BUSHFIRE PRONE LAND

Unless specified otherwise in this section of the certificate, the land is not bushfire prone.

12. PROPERTY VEGETATION PLANS

Unless specified otherwise in this section of the certificate, the land is not subject to a Property Vegetation Plan under the Native Vegetation Act 2003, as approved by any other authority that has notified Council of the existence of the plan.

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

Unless specified otherwise in this section of the certificate, the land is not subject to a Tree Order under the Trees (Disputes Between Neighbours) Act 2006, made by an authority that has notified Council of the existence of the order.

14. DIRECTIONS UNDER PART 3A

Unless specified otherwise in this section of the certificate, the land is not subject to a Direction by the Minister under section 75P (2) (c1) of the Act that a provision of an EPI does not have an effect.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

15. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR SENIORS HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application granted after 12.10.2007 under SEPP (Housing for Seniors or People with a Disability) 2004 setting out the terms of any conditions imposed under clause 18(2) or a current site compatibility certificate issued under clause 25 of the SEPP.

16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under clause 19 of SEPP (Infrastructure) 2007 where a valid site compatibility certificate has been issued.

17. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR AFFORDABLE RENTAL HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under SEPP (Affordable Rental Housing) 2009 where a valid site compatibility certificate and conditions have been issued.

18. PAPER SUBDIVISION INFORMATION

Unless specified otherwise in this section of the certificate, the land is not subject to a paper subdivision or subdivision order.

19. SITE VERIFICATION CERTIFICATES

Unless specified otherwise in this section of the certificate, the land is not subject to a current site verification certificate of which the Council is aware in respect to Division 3 of Part 4AA of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

MATTERS ARISING UNDER THE CONTAMINATED LAND MANAGEMENT ACT, 1997

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 59(2) of the Contaminated Land Management Act 1997.

MATTERS ARISING UNDER THE NATION BUILDING AND JOBS PLAN (STATE INFRASTRUCTURE DELIVERY) ACT, 2009

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 26 of the Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

This completes the prescribed matters for the certificate under section 149(2) of the Environmental Planning and Assessment Act 1979, as amended. While this certificate indicates the zoning of the land, it is suggested that the relevant Planning Instrument be inspected on Council's website under Development – Planning Maps or at Council's Customer Service Centre to provide an overall view of the area and the site's surrounding zonings.

SECTION 149(5) DETAILS

At the date of this certificate, the following relevant matters are provided in good faith in accordance with the requirements of Section 149(5) of the Environmental Planning and Assessment Act 1979.

Council has selected the following matters for checking as those most likely to be of concern and do not comprise an exhaustive list. The absence of any reference to any matter affecting the land shall not imply that any matter not referred to in this certificate does not affect the land.

ADDITIONAL INFORMATION

Unless specified otherwise in this section of the certificate, there are no relevant matters arising under Section 149(5) of the Environmental Planning and Assessment Act 1979.

The property is identified by the Salt Pan Creek Stormwater Catchment Study (June 2007) and Report Addendum (October 2009) as being at a medium risk of flooding. For further information on the flood risk and flood related development controls, contact Council on 9707 9999.

Please contact Council's general enquiries number listed at the bottom of this sheet for further information about any matter referred to in this certificate.

Edward Casari – Acting Team Leader
Land Information Management



PLANNING CERTIFICATE
UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 1

Bankstown Local Environmental Plan 2015 Amendments & Planning Proposals.
(relating to general information only which may affect part or the whole of the City)

Note: As of 1 July 2009, Draft LEP's have been replaced with "Planning Proposals". A planning proposal is a document that explains the intended effect of, and justification for, a proposed LEP.

Nil



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 2

State Environmental Planning Policies (SEPP's), Proposed SEPP's and Deemed SEPP's

Note: The names of the relevant instrument's plus their gazettal dates are listed below. For further details please refer to the Department of Planning website www.planning.nsw.gov.au under the heading "Planning System – Legislation and Planning Instruments".

SEPP No.19 – Bushland in Urban Areas, gazetted 24.10.1986
SEPP No.21 – Caravan Parks, gazetted 24.4.1992
SEPP No.30 – Intensive Agriculture, gazetted 8.12.1989
SEPP No.32 – Urban Consolidation (Redevelopment of Urban Land), gazetted 15.11.1991
SEPP No.33 – Hazardous and Offensive Development, gazetted 13.3.1992
SEPP No.50 – Canal Estate Development, gazetted 10.11.1997
SEPP No.55 – Remediation of Land, gazetted 28.8.1998
SEPP No.62 – Sustainable Aquaculture, gazetted 25.8.2000
SEPP No.64 – Advertising and Signage, gazetted 16.3.2001
SEPP No.65 – Design Quality of Residential Flat Development, gazetted 26.7.2002
SEPP – (Housing for Seniors or People with a Disability) 2004, gazetted 31.3.2004
SEPP – (Building Sustainability Index: BASIX) 2004, gazetted 25.6.2004
SEPP – (Major Development) 2005, gazetted 1.8.2005
SEPP – (Mining, Petroleum Production and Extractive Industries) 2007, gazetted 16.2.2007
SEPP – (Miscellaneous Consent Provisions) 2007, gazetted 26.10.2007
SEPP – (Infrastructure) 2007, gazetted 21.12.2007
SEPP – (Exempt and Complying Development Codes) 2008, gazetted 12.12.2008
SEPP – (Affordable Rental Housing) 2009, gazetted 31.7.2009
SEPP – (Sydney Drinking Water Catchment) 2011, gazetted 21.1.2011

PROPOSED SEPP - Competition SEPP, 27.7.2010

Note: As of 1 July 2009, regional environmental plans (REPs) are no longer part of the hierarchy of environmental planning instruments in NSW. The removal of the REP layer is intended to simplify the State's planning system. All existing REPs (listed below) are now deemed State environmental planning policies (SEPPs).

Deemed SEPP – Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment, gazetted 5.2.1999



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 3

Bankstown Development Control Plan 2014

DATE OF COMMENCEMENT – 5th March 2015

The following is a list of the contents within Bankstown Development Control Plan 2014. If further information is required please contact Council on 9707 9999.

INTRODUCTION	
PART A	PRECINCT CONTROLS
A1	Centres
A2	Corridors
A3	Key infill development sites
PART B	GENERAL CONTROLS
B1	Residential development
B2	Commercial centres
B3	Industrial precincts
B4	Sustainable development
B5	Parking
B6	Child care centres
B7	Educational establishments
B8	Places of public worship
B9	Sex services premises
B10	Telecommunications facilities
B11	Tree preservation order
B12	Flood risk management

Please note: Council may from time to time exhibit draft changes to the development control plan that may affect your land. To find out more, please contact Council on 9707 9999 or view Council's website and refer to the Development Control Plan - www.bankstown.nsw.gov.au



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Appendix 4

Land Use Table

Note. A type of development referred to in the Land Use Table is a reference to that type of development only to the extent it is not regulated by an applicable State environmental planning policy. The following State environmental planning policies in particular may be relevant to development on land to which this Plan applies:

State Environmental Planning Policy (Affordable Rental Housing) 2009 (including provision for secondary dwellings)

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004

State Environmental Planning Policy (Infrastructure) 2007 (relating to public facilities such as those for air transport, correction, education, electricity generation, health services, ports, railways, roads, waste management and water supply systems)

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

State Environmental Planning Policy (Rural Lands) 2008

State Environmental Planning Policy No 33—Hazardous and Offensive Development

State Environmental Planning Policy No 50—Canal Estate Development

State Environmental Planning Policy No 62—Sustainable Aquaculture

State Environmental Planning Policy No 64—Advertising and Signage

Zone RU4 Primary Production Small Lots
Permitted without consent Home occupations
Permitted with consent Agriculture; Animal boarding or training establishments; Building identification signs; Business identification signs; Dwelling houses; Environmental facilities; Environmental protection works; Extensive agriculture; Farm buildings; Flood mitigation works; Intensive plant agriculture; Kiosks; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Roads; Roadside stalls; Water supply systems
Prohibited Any development not specified in item 2 or 3

Zone R2 Low Density Residential
Permitted without consent Home occupations
Permitted with consent Bed and breakfast accommodation; Boarding houses; Boat sheds; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Exhibition homes; Flood mitigation works; Group homes; Health consulting rooms; Home-based child care; Hospitals; Information and education facilities; Jetties; Multi dwelling housing; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Water recreation structures; Water supply systems
Prohibited Any development not specified in item 2 or 3

Zone R3 Medium Density Residential
Permitted without consent Nil
Permitted with consent Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Group homes; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Water supply systems
Prohibited Any development not specified in item 2 or 3



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone R4 High Density Residential
Permitted without consent
Nil
Permitted with consent
Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Serviced apartments; Shop top housing; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B1 Neighbourhood Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Bulky goods premises; Business identification signs; Business premises; Car parks; Child care centres; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Garden centres; Hardware and building supplies; Health services facilities; Information and education facilities; Kiosks; Landscaping material supplies; Markets; Medical centres; Neighbourhood shops; Office premises; Places of public worship; Plant nurseries; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Research stations; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Seniors housing; Service stations; Shop top housing; Shops; Take away food and drink premises; Timber yards; Tourist and visitor accommodation; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B2 Local Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Service stations; Shop top housing; Tourist and visitor accommodation; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone B4 Mixed Use
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse and distribution centres; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone B5 Business Development
Permitted without consent
Nil
Permitted with consent
Building identification signs; Bulky goods premises; Business identification signs; Business premises; Child care centres; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Markets; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Respite day care centres; Roads; Serviced apartments; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone B6 Enterprise Corridor
Permitted without consent
Nil
Permitted with consent
Building identification signs; Bulky goods premises; Business identification signs; Business premises; Community facilities; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Light industries; Markets; Multi dwelling housing; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Residential flat buildings; Roads; Seniors housing; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone B7 Business Park
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Child care centres; Light industries; Neighbourhood shops; Office premises; Passenger transport facilities; Respite day care centres; Roads; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Places of public worship; Port facilities; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN1 General Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industrial storage establishments; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Port facilities; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN2 Light Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Garden centres; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Recreation facilities (major); Residential accommodation; Resource recovery facilities; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Transport depots; Truck depots; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone SP1 Special Activities
Permitted without consent Nil
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
Prohibited Any development not specified in item 2 or 3
Zone SP2 Infrastructure
Permitted without consent Nil
Permitted with consent Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose
Prohibited Any development not specified in item 2 or 3
Zone RE1 Public Recreation
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Car parks; Caravan parks; Charter and tourism boating facilities; Child care centres; Community facilities; Eco-tourist facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Flood mitigation works; Food and drink premises; Function centres; Information and education facilities; Intensive plant agriculture; Jetties; Kiosks; Marinas; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres; Roads; Water recreation structures; Water supply systems; Wharf or boating facilities
Prohibited Any development not specified in item 2 or 3
Zone RE2 Private Recreation
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Car parks; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Helipads; Kiosks; Marinas; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Roads; Water supply systems
Prohibited Any development not specified in item 2 or 3
Zone E1 National Parks and Nature Reserves
Permitted without consent Uses authorised under the National Parks and Wildlife Act 1974
Permitted with consent Nil
Prohibited Any development not specified in item 2 or 3
Zone W1 Natural Waterways
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Charter and tourism boating facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Jetties; Marinas; Mooring pens; Moorings; Water recreation structures; Wharf or boating facilities
Prohibited Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Hansen Yuncken Pty Ltd
TO BE COLLECTED

CERTIFICATE DETAILS

NUMBER	20151289	DATE	19-Mar-2015
--------	----------	------	-------------

RECEIPT AND REFERENCE DETAILS

FEE	\$133.00		
RECEIPT NUMBER	3021984	RECEIPT DATE	17-Mar-2015
REFERENCE	0434367611		

PROPERTY DESCRIPTION

PROPERTY	16 Eldridge Road, BANKSTOWN NSW 2200		
TITLE	Lot 1 DP 374219		
PARISH	Bankstown	COUNTY	CUMBERLAND

PLANNING INSTRUMENTS

In accordance with Section 149(2) and at the date of this certificate the following Environmental Planning Instruments apply to the land.

Bankstown Local Environmental Plan 2015 Gazetted on 05-Mar-2015

LAND ZONING

R2 Low Density Residential



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

SECTION 149(2) DETAILS

In accordance with section 149(2) of the Environmental Planning and Assessment Act 1979 (as amended) and at the date of this certificate, the following prescribed matters relate to the land.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

Affected by Bankstown Local Environmental Plan 2015 Amendments and Planning Proposals in respect of general information as detailed in Appendix 1.

Affected by State Environmental Planning Policies (SEPP's), Proposed State Environmental Planning Policies and Deemed State Environmental Planning Policies as detailed in Appendix 2.

Affected by Bankstown Development Control Plan 2014 (refer to Appendix 3 which lists the contents chapters within the DCP).

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Unless specified otherwise in this section of the certificate, the land does not include or comprise critical habitat, is not in a conservation area and has no environmental heritage item on the land.

The purposes for which the plan or instrument provides that development may be carried out within the zone without the need for development consent are specified in clause 3.1 of the LEP 2015 plan and the land use table as detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development may not be carried out within the zone except with development consent are specified in Part 2 and clause 3.2 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development is prohibited within the zone are specified in Part 2 and clauses 4.1A-2(c), 4.1B-2(4), 6.6 and 6.8 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

Unless specified otherwise in this section of the certificate, the land is not within any zone or land use under a Precinct Plan, a proposed Precinct Plan or Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

3. COMPLYING DEVELOPMENT

General Housing Code

Complying development under the General Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Subdivisions Code (strata subdivision)

Complying development under the Subdivisions Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- B1 Neighbourhood Centre, B2 Local Centre, B4 Mixed Use, B5 Business Development, B6 Enterprise Corridor, B7 Business Park
- IN1 General Industrial, IN2 Light Industrial
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one or more of the following 4 exemptions:-

- A Heritage item refer to clause 2 of this certificate,
- Land in the 25 or higher ANEF contour..... refer to clause 7 of this certificate,
(Unless the development is only for the erection of ancillary development, the alteration of or an addition to ancillary development or the alteration of a dwelling house)
- Acid sulfate soils class 1 or 2 refer to clause 7 of this certificate,
- Land in a vegetated buffer area refer to clause 7 of this certificate,

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

General Development Code

Complying development under the General Development Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Demolition Code

Complying development under the Demolition Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Commercial and Industrial Alterations Code

Complying development under the Commercial and Industrial Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots
- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- A Flood Control Lotrefer to clause 7A of this certificate.

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

Further: Although the land is non complying for Subdivisions 9 & 10, the Code may render the land complying for Subdivisions 1-8 and 11-12. Reference should be made to "Part 5 – Commercial and Industrial Alterations Code" of the SEPP for details.

Commercial and Industrial (New Buildings and Additions) Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** **not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots
- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- Acid Sulfate Soils class 1 or 2refer to clause 7 of this certificate
- A Vegetated Buffer Area.....refer to clause 7 of this certificate

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

4. COASTAL PROTECTION

Unless specified otherwise in this section of the certificate, the land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act 1979.

4A. CERTAIN INFORMATION RELATING TO BEACHES AND COASTS

Unless specified otherwise in this section of the certificate, the land is not subject to an order under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (or on public land adjacent to the land) and, Council has not been notified under Section 55X of the Coastal Protection Act 1979 that temporary coastal protection works have been placed on the land (or on public land adjacent to the land).



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

Unless specified otherwise in this section of the certificate, the owner (or any previous owner) has not consented in writing that the land is subject to annual charges under Section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works.

5. MINE SUBSIDENCE

Not affected by Section 15 of the Mine Subsidence Compensation Act 1961, proclaiming land to be a mine subsidence district.

6. ROAD WIDENING AND REALIGNMENT

Not affected by any road widening or road realignment under (1) Division 2 of part 3 of the Roads Act 1993; or (2) any Environmental Planning Instrument; or (3) any resolution of Council. However, should your property be near an arterial or main road you should check with the Roads and Maritime Services for possible affectations.

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

Unless specified otherwise in this section of the certificate, the land is not affected by policies adopted by Council or by any other authority (that has notified Council of its adoption) that restricts development of the land. For bush fire prone land refer to section 11. For flood prone land refer to section 7A.

Affected by a resolution of Council adopting a policy concerning the management of contaminated land. That policy applies to all land in the City of Bankstown and will restrict development of the land if the circumstances set out in the policy prevail. A copy of the policy is available on Council's website at www.bankstown.nsw.gov.au or from the Customer Service Area.

Note: Additional information regarding contaminated land matters for this property may also be provided on part 5 of this section 149 planning certificate. For further information contact Council on Ph.97079999.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

Unless specified otherwise in this section of the certificate, the land is not affected by flood related development controls.

A Flood control lot.

The property is affected by a policy known as Bankstown Development Control Plan 2014, Part B12 - Flood Risk Management and clause 6.3 – Flood planning of the LEP 2015, by reference to the Salt Pan Creek Stormwater Catchment Study (June 2007) and Report Addendum (October 2009) (a copy of which is available for inspection at Council's Offices), which categorises land affected by the 100 year flood into two flood risk precincts:

- High flood risk precinct – Land below the 100 year flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties; and
- Medium flood risk precinct - Land below the 100 year flood that is not subject to a high hydraulic hazard and where there are no evacuation difficulties.

Bankstown Development Control Plan 2014 includes flood related development controls for properties based on the relevant flood risk precinct. Contact Council for information about the flood risk precinct applying to this property.

8. LAND RESERVED FOR ACQUISITION

Not affected by either an Environmental Planning Instrument or proposed Environmental Planning Instrument referred to in clause 5.1 providing for the acquisition of the land or part of the land by a public authority, as referred to in Section 27 of the Environmental Planning & Assessment Act. Reference should be made to the LEP 2015 plan as a whole for details.

9. CONTRIBUTION PLANS

Affected by Bankstown City Council Section 94A Development Contributions Plan 2009 which allows Council to impose a levy on development within the City of Bankstown in accordance with Directions issued by the Minister for Planning. The levy will be spent on the provision of public works and infrastructure. Date of commencement 8th June 2009. For further details on the plan contact Council on 9707 9999 or visit Council's website – www.bankstown.nsw.gov.au

9A. BIODIVERSITY CERTIFIED LAND

Unless specified otherwise in this section of the certificate, the land is not biodiversity certified land within the meaning of Part 7AA of the Threatened Species Conservation Act 1995.

10. BIOBANKING AGREEMENTS

Unless specified otherwise in this section of the certificate, the land is not subject to a Biobanking Agreement under Part 7A of the Threatened Species Conservation Act 1995, made by the Department of Environment, Climate Change and Water that has notified Council of the existence of the agreement.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

11. BUSHFIRE PRONE LAND

Unless specified otherwise in this section of the certificate, the land is not bushfire prone.

12. PROPERTY VEGETATION PLANS

Unless specified otherwise in this section of the certificate, the land is not subject to a Property Vegetation Plan under the Native Vegetation Act 2003, as approved by any other authority that has notified Council of the existence of the plan.

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

Unless specified otherwise in this section of the certificate, the land is not subject to a Tree Order under the Trees (Disputes Between Neighbours) Act 2006, made by an authority that has notified Council of the existence of the order.

14. DIRECTIONS UNDER PART 3A

Unless specified otherwise in this section of the certificate, the land is not subject to a Direction by the Minister under section 75P (2) (c1) of the Act that a provision of an EPI does not have an effect.

15. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR SENIORS HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application granted after 12.10.2007 under SEPP (Housing for Seniors or People with a Disability) 2004 setting out the terms of any conditions imposed under clause 18(2) or a current site compatibility certificate issued under clause 25 of the SEPP.

16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under clause 19 of SEPP (Infrastructure) 2007 where a valid site compatibility certificate has been issued.

17. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR AFFORDABLE RENTAL HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under SEPP (Affordable Rental Housing) 2009 where a valid site compatibility certificate and conditions have been issued.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

18. PAPER SUBDIVISION INFORMATION

Unless specified otherwise in this section of the certificate, the land is not subject to a paper subdivision or subdivision order.

19. SITE VERIFICATION CERTIFICATES

Unless specified otherwise in this section of the certificate, the land is not subject to a current site verification certificate of which the Council is aware in respect to Division 3 of Part 4AA of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

MATTERS ARISING UNDER THE CONTAMINATED LAND MANAGEMENT ACT, 1997

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 59(2) of the Contaminated Land Management Act 1997.

MATTERS ARISING UNDER THE NATION BUILDING AND JOBS PLAN (STATE INFRASTRUCTURE DELIVERY) ACT, 2009

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 26 of the Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009.

This completes the prescribed matters for the certificate under section 149(2) of the Environmental Planning and Assessment Act 1979, as amended. While this certificate indicates the zoning of the land, it is suggested that the relevant Planning Instrument be inspected on Council's website under Development – Planning Maps or at Council's Customer Service Centre to provide an overall view of the area and the site's surrounding zonings.

SECTION 149(5) DETAILS

At the date of this certificate, the following relevant matters are provided in good faith in accordance with the requirements of Section 149(5) of the Environmental Planning and Assessment Act 1979.

Council has selected the following matters for checking as those most likely to be of concern and do not comprise an exhaustive list. The absence of any reference to any matter affecting the land shall not imply that any matter not referred to in this certificate does not affect the land.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

ADDITIONAL INFORMATION

Unless specified otherwise in this section of the certificate, there are no relevant matters arising under Section 149(5) of the Environmental Planning and Assessment Act 1979.

The property is identified by the Salt Pan Creek Stormwater Catchment Study (June 2007) and Report Addendum (October 2009) as being at a medium risk of flooding. For further information on the flood risk and flood related development controls, contact Council on 9707 9999.

Please contact Council's general enquiries number listed at the bottom of this sheet for further information about any matter referred to in this certificate.

Edward Casari – Acting Team Leader
Land Information Management



PLANNING CERTIFICATE
UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 1

Bankstown Local Environmental Plan 2015 Amendments & Planning Proposals.
(relating to general information only which may affect part or the whole of the City)

Note: As of 1 July 2009, Draft LEP's have been replaced with "Planning Proposals". A planning proposal is a document that explains the intended effect of, and justification for, a proposed LEP.

Nil



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 2

State Environmental Planning Policies (SEPP's), Proposed SEPP's and Deemed SEPP's

Note: The names of the relevant instrument's plus their gazettal dates are listed below. For further details please refer to the Department of Planning website www.planning.nsw.gov.au under the heading "Planning System – Legislation and Planning Instruments".

SEPP No.19 – Bushland in Urban Areas, gazetted 24.10.1986
SEPP No.21 – Caravan Parks, gazetted 24.4.1992
SEPP No.30 – Intensive Agriculture, gazetted 8.12.1989
SEPP No.32 – Urban Consolidation (Redevelopment of Urban Land), gazetted 15.11.1991
SEPP No.33 – Hazardous and Offensive Development, gazetted 13.3.1992
SEPP No.50 – Canal Estate Development, gazetted 10.11.1997
SEPP No.55 – Remediation of Land, gazetted 28.8.1998
SEPP No.62 – Sustainable Aquaculture, gazetted 25.8.2000
SEPP No.64 – Advertising and Signage, gazetted 16.3.2001
SEPP No.65 – Design Quality of Residential Flat Development, gazetted 26.7.2002
SEPP – (Housing for Seniors or People with a Disability) 2004, gazetted 31.3.2004
SEPP – (Building Sustainability Index: BASIX) 2004, gazetted 25.6.2004
SEPP – (Major Development) 2005, gazetted 1.8.2005
SEPP – (Mining, Petroleum Production and Extractive Industries) 2007, gazetted 16.2.2007
SEPP – (Miscellaneous Consent Provisions) 2007, gazetted 26.10.2007
SEPP – (Infrastructure) 2007, gazetted 21.12.2007
SEPP – (Exempt and Complying Development Codes) 2008, gazetted 12.12.2008
SEPP – (Affordable Rental Housing) 2009, gazetted 31.7.2009
SEPP – (Sydney Drinking Water Catchment) 2011, gazetted 21.1.2011

PROPOSED SEPP - Competition SEPP, 27.7.2010

Note: As of 1 July 2009, regional environmental plans (REPs) are no longer part of the hierarchy of environmental planning instruments in NSW. The removal of the REP layer is intended to simplify the State's planning system. All existing REPs (listed below) are now deemed State environmental planning policies (SEPPs).

Deemed SEPP – Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment, gazetted 5.2.1999



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 3

Bankstown Development Control Plan 2014

DATE OF COMMENCEMENT – 5th March 2015

The following is a list of the contents within Bankstown Development Control Plan 2014. If further information is required please contact Council on 9707 9999.

INTRODUCTION	
PART A	PRECINCT CONTROLS
A1	Centres
A2	Corridors
A3	Key infill development sites
PART B	GENERAL CONTROLS
B1	Residential development
B2	Commercial centres
B3	Industrial precincts
B4	Sustainable development
B5	Parking
B6	Child care centres
B7	Educational establishments
B8	Places of public worship
B9	Sex services premises
B10	Telecommunications facilities
B11	Tree preservation order
B12	Flood risk management

Please note: Council may from time to time exhibit draft changes to the development control plan that may affect your land. To find out more, please contact Council on 9707 9999 or view Council's website and refer to the Development Control Plan - www.bankstown.nsw.gov.au



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 4

Land Use Table

Note. A type of development referred to in the Land Use Table is a reference to that type of development only to the extent it is not regulated by an applicable State environmental planning policy. The following State environmental planning policies in particular may be relevant to development on land to which this Plan applies:

State Environmental Planning Policy (Affordable Rental Housing) 2009 (including provision for secondary dwellings)
State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy (Infrastructure) 2007 (relating to public facilities such as those for air transport, correction, education, electricity generation, health services, ports, railways, roads, waste management and water supply systems)
State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy (Rural Lands) 2008
State Environmental Planning Policy No 33—Hazardous and Offensive Development
State Environmental Planning Policy No 50—Canal Estate Development
State Environmental Planning Policy No 62—Sustainable Aquaculture
State Environmental Planning Policy No 64—Advertising and Signage

Zone RU4 Primary Production Small Lots
Permitted without consent Home occupations
Permitted with consent Agriculture; Animal boarding or training establishments; Building identification signs; Business identification signs; Dwelling houses; Environmental facilities; Environmental protection works; Extensive agriculture; Farm buildings; Flood mitigation works; Intensive plant agriculture; Kiosks; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Roads; Roadside stalls; Water supply systems
Prohibited Any development not specified in item 2 or 3

Zone R2 Low Density Residential
Permitted without consent Home occupations
Permitted with consent Bed and breakfast accommodation; Boarding houses; Boat sheds; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Exhibition homes; Flood mitigation works; Group homes; Health consulting rooms; Home-based child care; Hospitals; Information and education facilities; Jetties; Multi dwelling housing; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Seniors housing; Water recreation structures; Water supply systems
Prohibited Any development not specified in item 2 or 3

Zone R3 Medium Density Residential
Permitted without consent Nil
Permitted with consent Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Group homes; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Water supply systems
Prohibited Any development not specified in item 2 or 3



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone R4 High Density Residential
Permitted without consent
Nil
Permitted with consent
Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Serviced apartments; Shop top housing; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B1 Neighbourhood Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Bulky goods premises; Business identification signs; Business premises; Car parks; Child care centres; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Garden centres; Hardware and building supplies; Health services facilities; Information and education facilities; Kiosks; Landscaping material supplies; Markets; Medical centres; Neighbourhood shops; Office premises; Places of public worship; Plant nurseries; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Research stations; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Seniors housing; Service stations; Shop top housing; Shops; Take away food and drink premises; Timber yards; Tourist and visitor accommodation; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B2 Local Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Service stations; Shop top housing; Tourist and visitor accommodation; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone B4 Mixed Use
Permitted without consent Nil
Permitted with consent Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse and distribution centres; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies

Zone B5 Business Development
Permitted without consent Nil
Permitted with consent Building identification signs; Bulky goods premises; Business identification signs; Business premises; Child care centres; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Markets; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Respite day care centres; Roads; Serviced apartments; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies

Zone B6 Enterprise Corridor
Permitted without consent Nil
Permitted with consent Building identification signs; Bulky goods premises; Business identification signs; Business premises; Community facilities; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Light industries; Markets; Multi dwelling housing; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Residential flat buildings; Roads; Seniors housing; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Zone B7 Business Park
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Child care centres; Light industries; Neighbourhood shops; Office premises; Passenger transport facilities; Respite day care centres; Roads; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Places of public worship; Port facilities; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN1 General Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industrial storage establishments; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Port facilities; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN2 Light Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Garden centres; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Recreation facilities (major); Residential accommodation; Resource recovery facilities; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Transport depots; Truck depots; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Zone SP1 Special Activities
Permitted without consent Nil
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
Prohibited Any development not specified in item 2 or 3
Zone SP2 Infrastructure
Permitted without consent Nil
Permitted with consent Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose
Prohibited Any development not specified in item 2 or 3
Zone RE1 Public Recreation
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Car parks; Caravan parks; Charter and tourism boating facilities; Child care centres; Community facilities; Eco-tourist facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Flood mitigation works; Food and drink premises; Function centres; Information and education facilities; Intensive plant agriculture; Jetties; Kiosks; Marinas; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres; Roads; Water recreation structures; Water supply systems; Wharf or boating facilities
Prohibited Any development not specified in item 2 or 3
Zone RE2 Private Recreation
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Car parks; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Helipads; Kiosks; Marinas; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Roads; Water supply systems
Prohibited Any development not specified in item 2 or 3
Zone E1 National Parks and Nature Reserves
Permitted without consent Uses authorised under the National Parks and Wildlife Act 1974
Permitted with consent Nil
Prohibited Any development not specified in item 2 or 3
Zone W1 Natural Waterways
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Charter and tourism boating facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Jetties; Marinas; Mooring pens; Moorings; Water recreation structures; Wharf or boating facilities
Prohibited Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3



PLANNING CERTIFICATE
UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Hansen Yuncken Pty Ltd
TO BE COLLECTED

CERTIFICATE DETAILS

NUMBER	20151288	DATE	19-Mar-2015
---------------	----------	-------------	-------------

RECEIPT AND REFERENCE DETAILS

FEE	\$133.00		
RECEIPT NUMBER	3021984	RECEIPT DATE	17-Mar-2015
REFERENCE	0434367611		

PROPERTY DESCRIPTION

PROPERTY	20 Eldridge Road, BANKSTOWN NSW 2200		
TITLE	Lot 1 DP 374220		
PARISH	Bankstown	COUNTY	CUMBERLAND

PLANNING INSTRUMENTS

In accordance with Section 149(2) and at the date of this certificate the following Environmental Planning Instruments apply to the land.

Bankstown Local Environmental Plan 2015 Gazetted on 05-Mar-2015

LAND ZONING

R2 Low Density Residential



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

SECTION 149(2) DETAILS

In accordance with section 149(2) of the Environmental Planning and Assessment Act 1979 (as amended) and at the date of this certificate, the following prescribed matters relate to the land.

1. NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

Affected by Bankstown Local Environmental Plan 2015 Amendments and Planning Proposals in respect of general information as detailed in Appendix 1.

Affected by State Environmental Planning Policies (SEPP's), Proposed State Environmental Planning Policies and Deemed State Environmental Planning Policies as detailed in Appendix 2.

Affected by Bankstown Development Control Plan 2014 (refer to Appendix 3 which lists the contents chapters within the DCP).

2. ZONING AND LAND USE UNDER RELEVANT LEPs

Unless specified otherwise in this section of the certificate, the land does not include or comprise critical habitat, is not in a conservation area and has no environmental heritage item on the land.

The purposes for which the plan or instrument provides that development may be carried out within the zone without the need for development consent are specified in clause 3.1 of the LEP 2015 plan and the land use table as detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development may not be carried out within the zone except with development consent are specified in Part 2 and clause 3.2 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

The purposes for which the plan or instrument provides that development is prohibited within the zone are specified in Part 2 and clauses 4.1A-2(c), 4.1B-2(4), 6.6 and 6.8 of the LEP 2015 plan and detailed in Appendix 4. Reference should be made to the LEP 2015 plan as a whole for details.

2A. ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

Unless specified otherwise in this section of the certificate, the land is not within any zone or land use under a Precinct Plan, a proposed Precinct Plan or Part 3 of State Environmental Planning Policy (Sydney Region Growth Centres) 2006.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

3. COMPLYING DEVELOPMENT

General Housing Code

Complying development under the General Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Subdivisions Code (strata subdivision)

Complying development under the Subdivisions Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- B1 Neighbourhood Centre, B2 Local Centre, B4 Mixed Use, B5 Business Development, B6 Enterprise Corridor, B7 Business Park
- IN1 General Industrial, IN2 Light Industrial
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one or more of the following 4 exemptions:-

- A Heritage item refer to clause 2 of this certificate,
- Land in the 25 or higher ANEF contour..... refer to clause 7 of this certificate,
(Unless the development is only for the erection of ancillary development, the alteration of or an addition to ancillary development or the alteration of a dwelling house)
- Acid sulfate soils class 1 or 2 refer to clause 7 of this certificate,
- Land in a vegetated buffer area refer to clause 7 of this certificate,

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

General Development Code

Complying development under the General Development Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Demolition Code

Complying development under the Demolition Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code within "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may** be carried out on the land.

Commercial and Industrial Alterations Code

Complying development under the Commercial and Industrial Alterations Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots
- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- A Flood Control Lotrefer to clause 7A of this certificate.

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

Further: Although the land is non complying for Subdivisions 9 & 10, the Code may render the land complying for Subdivisions 1-8 and 11-12. Reference should be made to "Part 5 – Commercial and Industrial Alterations Code" of the SEPP for details.

Commercial and Industrial (New Buildings and Additions) Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code within the provisions of "State Environmental Planning Policy (Exempt and Complying Development Codes) 2008" **may not** be carried out on the land.

The land is non complying because the land has been identified by an environmental planning instrument as being either one of the following zones:-

- RU4 Primary Production Small Lots
- R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential
- SP1 Special Activities, SP2 Infrastructure
- RE1 Public Recreation, RE2 Private Recreation
- E1 National Park and Nature Reserves
- Land unzoned under LEP 2015.....refer to the Land Zoning of this certificate on page 1.

OR

The land is affected by one of the following exemptions:-

- A Heritage item refer to clause 2 of this certificate.
- Acid Sulfate Soils class 1 or 2refer to clause 7 of this certificate
- A Vegetated Buffer Area.....refer to clause 7 of this certificate

Note: If the land has been rendered non complying due to an exemption listed above, you are advised to check with Council for the extent of the exemption. The Code may render the land complying for any land which is outside the extent of the exemption. Reference should be made to the "Planning Maps" on Council's website www.bankstown.nsw.gov.au which identifies the land exemptions.

4. COASTAL PROTECTION

Unless specified otherwise in this section of the certificate, the land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act 1979.

4A. CERTAIN INFORMATION RELATING TO BEACHES AND COASTS

Unless specified otherwise in this section of the certificate, the land is not subject to an order under Part 4D of the Coastal Protection Act 1979 in relation to temporary coastal protection works (or on public land adjacent to the land) and, Council has not been notified under Section 55X of the Coastal Protection Act 1979 that temporary coastal protection works have been placed on the land (or on public land adjacent to the land)



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

4B. ANNUAL CHARGES UNDER LOCAL GOVERNMENT ACT 1993 FOR COASTAL PROTECTION SERVICES THAT RELATE TO EXISTING COASTAL PROTECTION WORKS

Unless specified otherwise in this section of the certificate, the owner (or any previous owner) has not consented in writing that the land is subject to annual charges under Section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works.

5. MINE SUBSIDENCE

Not affected by Section 15 of the Mine Subsidence Compensation Act 1961, proclaiming land to be a mine subsidence district.

6. ROAD WIDENING AND REALIGNMENT

Not affected by any road widening or road realignment under (1) Division 2 of part 3 of the Roads Act 1993; or (2) any Environmental Planning Instrument; or (3) any resolution of Council. However, should your property be near an arterial or main road you should check with the Roads and Maritime Services for possible affectations.

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

Unless specified otherwise in this section of the certificate, the land is not affected by policies adopted by Council or by any other authority (that has notified Council of its adoption) that restricts development of the land. For bush fire prone land refer to section 11. For flood prone land refer to section 7A.

Affected by a resolution of Council adopting a policy concerning the management of contaminated land. That policy applies to all land in the City of Bankstown and will restrict development of the land if the circumstances set out in the policy prevail. A copy of the policy is available on Council's website at www.bankstown.nsw.gov.au or from the Customer Service Area.

Note: Additional information regarding contaminated land matters for this property may also be provided on part 5 of this section 149 planning certificate. For further information contact Council on Ph.97079999.

7A. FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

Unless specified otherwise in this section of the certificate, the land is not affected by flood related development controls.

8. LAND RESERVED FOR ACQUISITION

Not affected by either an Environmental Planning Instrument or proposed Environmental Planning Instrument referred to in clause 5.1 providing for the acquisition of the land or part of the land by a public authority, as referred to in Section 27 of the Environmental Planning & Assessment Act. Reference should be made to the LEP 2015 plan as a whole for details.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

9. CONTRIBUTION PLANS

Affected by Bankstown City Council Section 94A Development Contributions Plan 2009 which allows Council to impose a levy on development within the City of Bankstown in accordance with Directions issued by the Minister for Planning. The levy will be spent on the provision of public works and infrastructure. Date of commencement 8th June 2009. For further details on the plan contact Council on 9707 9999 or visit Council's website – www.bankstown.nsw.gov.au

9A. BIODIVERSITY CERTIFIED LAND

Unless specified otherwise in this section of the certificate, the land is not biodiversity certified land within the meaning of Part 7AA of the Threatened Species Conservation Act 1995.

10. BIOBANKING AGREEMENTS

Unless specified otherwise in this section of the certificate, the land is not subject to a Biobanking Agreement under Part 7A of the Threatened Species Conservation Act 1995, made by the Department of Environment, Climate Change and Water that has notified Council of the existence of the agreement.

11. BUSHFIRE PRONE LAND

Unless specified otherwise in this section of the certificate, the land is not bushfire prone.

12. PROPERTY VEGETATION PLANS

Unless specified otherwise in this section of the certificate, the land is not subject to a Property Vegetation Plan under the Native Vegetation Act 2003, as approved by any other authority that has notified Council of the existence of the plan.

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

Unless specified otherwise in this section of the certificate, the land is not subject to a Tree Order under the Trees (Disputes Between Neighbours) Act 2006, made by an authority that has notified Council of the existence of the order.

14. DIRECTIONS UNDER PART 3A

Unless specified otherwise in this section of the certificate, the land is not subject to a Direction by the Minister under section 75P (2) (c1) of the Act that a provision of an EPI does not have an effect.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

15. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR SENIORS HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application granted after 12.10.2007 under SEPP (Housing for Seniors or People with a Disability) 2004 setting out the terms of any conditions imposed under clause 18(2) or a current site compatibility certificate issued under clause 25 of the SEPP.

16. SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under clause 19 of SEPP (Infrastructure) 2007 where a valid site compatibility certificate has been issued.

17. SITE COMPATIBILITY CERTIFICATES & CONDITIONS FOR AFFORDABLE RENTAL HOUSING

Unless specified otherwise in this section of the certificate, the land is not subject to a development application under SEPP (Affordable Rental Housing) 2009 where a valid site compatibility certificate and conditions have been issued.

18. PAPER SUBDIVISION INFORMATION

Unless specified otherwise in this section of the certificate, the land is not subject to a paper subdivision or subdivision order.

19. SITE VERIFICATION CERTIFICATES

Unless specified otherwise in this section of the certificate, the land is not subject to a current site verification certificate of which the Council is aware in respect to Division 3 of Part 4AA of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

MATTERS ARISING UNDER THE CONTAMINATED LAND MANAGEMENT ACT, 1997

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 59(2) of the Contaminated Land Management Act 1997.

MATTERS ARISING UNDER THE NATION BUILDING AND JOBS PLAN (STATE INFRASTRUCTURE DELIVERY) ACT, 2009

Unless specified otherwise in this section of the certificate, there are no matters arising under Section 26 of the Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009.



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

This completes the prescribed matters for the certificate under section 149(2) of the Environmental Planning and Assessment Act 1979, as amended. While this certificate indicates the zoning of the land, it is suggested that the relevant Planning Instrument be inspected on Council's website under Development – Planning Maps or at Council's Customer Service Centre to provide an overall view of the area and the site's surrounding zonings.

SECTION 149(5) DETAILS

At the date of this certificate, the following relevant matters are provided in good faith in accordance with the requirements of Section 149(5) of the Environmental Planning and Assessment Act 1979.

Council has selected the following matters for checking as those most likely to be of concern and do not comprise an exhaustive list. The absence of any reference to any matter affecting the land shall not imply that any matter not referred to in this certificate does not affect the land.

ADDITIONAL INFORMATION

Unless specified otherwise in this section of the certificate, there are no relevant matters arising under Section 149(5) of the Environmental Planning and Assessment Act 1979.

Please contact Council's general enquiries number listed at the bottom of this sheet for further information about any matter referred to in this certificate.

Edward Casari – Acting Team Leader
Land Information Management



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 1

Bankstown Local Environmental Plan 2015 Amendments & Planning Proposals. *(relating to general information only which may affect part or the whole of the City)*

Note: As of 1 July 2009, Draft LEP's have been replaced with "Planning Proposals". A planning proposal is a document that explains the intended effect of, and justification for, a proposed LEP.

Nil



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 2

State Environmental Planning Policies (SEPP's), Proposed SEPP's and Deemed SEPP's

Note: The names of the relevant instrument's plus their gazettal dates are listed below. For further details please refer to the Department of Planning website www.planning.nsw.gov.au under the heading "Planning System – Legislation and Planning Instruments".

SEPP No.19 – Bushland in Urban Areas, gazetted 24.10.1986
SEPP No.21 – Caravan Parks, gazetted 24.4.1992
SEPP No.30 – Intensive Agriculture, gazetted 8.12.1989
SEPP No.32 – Urban Consolidation (Redevelopment of Urban Land), gazetted 15.11.1991
SEPP No.33 – Hazardous and Offensive Development, gazetted 13.3.1992
SEPP No.50 – Canal Estate Development, gazetted 10.11.1997
SEPP No.55 – Remediation of Land, gazetted 28.8.1998
SEPP No.62 – Sustainable Aquaculture, gazetted 25.8.2000
SEPP No.64 – Advertising and Signage, gazetted 16.3.2001
SEPP No.65 – Design Quality of Residential Flat Development, gazetted 26.7.2002
SEPP – (Housing for Seniors or People with a Disability) 2004, gazetted 31.3.2004
SEPP – (Building Sustainability Index: BASIX) 2004, gazetted 25.6.2004
SEPP – (Major Development) 2005, gazetted 1.8.2005
SEPP – (Mining, Petroleum Production and Extractive Industries) 2007, gazetted 16.2.2007
SEPP – (Miscellaneous Consent Provisions) 2007, gazetted 26.10.2007
SEPP – (Infrastructure) 2007, gazetted 21.12.2007
SEPP – (Exempt and Complying Development Codes) 2008, gazetted 12.12.2008
SEPP – (Affordable Rental Housing) 2009, gazetted 31.7.2009
SEPP – (Sydney Drinking Water Catchment) 2011, gazetted 21.1.2011

PROPOSED SEPP - Competition SEPP, 27.7.2010

Note: As of 1 July 2009, regional environmental plans (REPs) are no longer part of the hierarchy of environmental planning instruments in NSW. The removal of the REP layer is intended to simplify the State's planning system. All existing REPs (listed below) are now deemed State environmental planning policies (SEPPs).

Deemed SEPP – Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment, gazetted 5.2.1999



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 3

Bankstown Development Control Plan 2014

DATE OF COMMENCEMENT – 5th March 2015

The following is a list of the contents within Bankstown Development Control Plan 2014. If further information is required please contact Council on 9707 9999.

INTRODUCTION	
PART A	PRECINCT CONTROLS
A1	Centres
A2	Corridors
A3	Key infill development sites
PART B	GENERAL CONTROLS
B1	Residential development
B2	Commercial centres
B3	Industrial precincts
B4	Sustainable development
B5	Parking
B6	Child care centres
B7	Educational establishments
B8	Places of public worship
B9	Sex services premises
B10	Telecommunications facilities
B11	Tree preservation order
B12	Flood risk management

Please note: Council may from time to time exhibit draft changes to the development control plan that may affect your land. To find out more, please contact Council on 9707 9999 or view Council's website and refer to the Development Control Plan - www.bankstown.nsw.gov.au



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT
ACT, 1979

Appendix 4

Land Use Table

Note. A type of development referred to in the Land Use Table is a reference to that type of development only to the extent it is not regulated by an applicable State environmental planning policy. The following State environmental planning policies in particular may be relevant to development on land to which this Plan applies:

State Environmental Planning Policy (Affordable Rental Housing) 2009 (including provision for secondary dwellings)

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004

State Environmental Planning Policy (Infrastructure) 2007 (relating to public facilities such as those for air transport, correction, education, electricity generation, health services, ports, railways, roads, waste management and water supply systems)

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

State Environmental Planning Policy (Rural Lands) 2008

State Environmental Planning Policy No 33—Hazardous and Offensive Development

State Environmental Planning Policy No 50—Canal Estate Development

State Environmental Planning Policy No 62—Sustainable Aquaculture

State Environmental Planning Policy No 64—Advertising and Signage

Zone RU4 Primary Production Small Lots
Permitted without consent Home occupations
Permitted with consent Agriculture; Animal boarding or training establishments; Building identification signs; Business identification signs; Dwelling houses; Environmental facilities; Environmental protection works; Extensive agriculture; Farm buildings; Flood mitigation works; Intensive plant agriculture; Kiosks; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Roads; Roadside stalls; Water supply systems
Prohibited Any development not specified in item 2 or 3
Zone R2 Low Density Residential
Permitted without consent Home occupations
Permitted with consent Bed and breakfast accommodation; Boarding houses; Boat sheds; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Exhibition homes; Flood mitigation works; Group homes; Health consulting rooms; Home-based child care; Hospitals; Information and education facilities; Jetties; Multi dwelling housing; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Water recreation structures; Water supply systems
Prohibited Any development not specified in item 2 or 3
Zone R3 Medium Density Residential
Permitted without consent Nil
Permitted with consent Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Group homes; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Water supply systems
Prohibited Any development not specified in item 2 or 3



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone R4 High Density Residential
Permitted without consent
Nil
Permitted with consent
Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Car parks; Child care centres; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Information and education facilities; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Seniors housing; Serviced apartments; Shop top housing; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B1 Neighbourhood Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Bulky goods premises; Business identification signs; Business premises; Car parks; Child care centres; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Garden centres; Hardware and building supplies; Health services facilities; Information and education facilities; Kiosks; Landscaping material supplies; Markets; Medical centres; Neighbourhood shops; Office premises; Places of public worship; Plant nurseries; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Research stations; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Seniors housing; Service stations; Shop top housing; Shops; Take away food and drink premises; Timber yards; Tourist and visitor accommodation; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Water supply systems
Prohibited
Any development not specified in item 2 or 3

Zone B2 Local Centre
Permitted without consent
Nil
Permitted with consent
Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Service stations; Shop top housing; Tourist and visitor accommodation; Any other development not specified in item 2 or 4
Prohibited
Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone B4 Mixed Use
Permitted without consent Nil
Permitted with consent Boarding houses; Building identification signs; Business identification signs; Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Hotel or motel accommodation; Information and education facilities; Medical centres; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse and distribution centres; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies

Zone B5 Business Development
Permitted without consent Nil
Permitted with consent Building identification signs; Bulky goods premises; Business identification signs; Business premises; Child care centres; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Markets; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Respite day care centres; Roads; Serviced apartments; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies

Zone B6 Enterprise Corridor
Permitted without consent Nil
Permitted with consent Building identification signs; Bulky goods premises; Business identification signs; Business premises; Community facilities; Food and drink premises; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Kiosks; Landscaping material supplies; Light industries; Markets; Multi dwelling housing; Neighbourhood shops; Office premises; Passenger transport facilities; Plant nurseries; Residential flat buildings; Roads; Seniors housing; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sewage treatment plants; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone B7 Business Park
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Child care centres; Light industries; Neighbourhood shops; Office premises; Passenger transport facilities; Respite day care centres; Roads; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Places of public worship; Port facilities; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Resource recovery facilities; Restricted premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN1 General Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industrial storage establishments; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Port facilities; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies
Zone IN2 Light Industrial
Permitted without consent Nil
Permitted with consent Agricultural produce industries; Building identification signs; Business identification signs; Depots; Food and drink premises; Garden centres; Hardware and building supplies; Hospitals; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Markets; Medical centres; Neighbourhood shops; Plant nurseries; Roads; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4
Prohibited Agriculture; Air transport facilities; Airstrips; Amusement centres; Biosolids treatment facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Port facilities; Recreation facilities (major); Residential accommodation; Resource recovery facilities; Respite day care centres; Restricted premises; Rural industries; Schools; Sewage treatment plants; Signage; Tourist and visitor accommodation; Transport depots; Truck depots; Waste disposal facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies



PLANNING CERTIFICATE

UNDER SECTION 149 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Zone SP1 Special Activities
Permitted without consent Nil
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
Prohibited Any development not specified in item 2 or 3
Zone SP2 Infrastructure
Permitted without consent Nil
Permitted with consent Roads; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose
Prohibited Any development not specified in item 2 or 3
Zone RE1 Public Recreation
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Car parks; Caravan parks; Charter and tourism boating facilities; Child care centres; Community facilities; Eco-tourist facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Flood mitigation works; Food and drink premises; Function centres; Information and education facilities; Intensive plant agriculture; Jetties; Kiosks; Marinas; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres; Roads; Water recreation structures; Water supply systems; Wharf or boating facilities
Prohibited Any development not specified in item 2 or 3
Zone RE2 Private Recreation
Permitted without consent Nil
Permitted with consent Building identification signs; Business identification signs; Car parks; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Helipads; Kiosks; Marinas; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Roads; Water supply systems
Prohibited Any development not specified in item 2 or 3
Zone E1 National Parks and Nature Reserves
Permitted without consent Uses authorised under the National Parks and Wildlife Act 1974
Permitted with consent Nil
Prohibited Any development not specified in item 2 or 3
Zone W1 Natural Waterways
Permitted without consent Nil
Permitted with consent Boat launching ramps; Boat sheds; Charter and tourism boating facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Jetties; Marinas; Mooring pens; Moorings; Water recreation structures; Wharf or boating facilities
Prohibited Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Appendix G

Dangerous Goods Licences Search Result



WorkCover

Our Ref: D15/120682
Your Ref: David Walker

WorkCover NSW
92-100 Donnison Street, Gosford, NSW 2250
Locked Bag 2906, Lisarow, NSW 2252
T 02 4321 5000 F 02 4325 4145
Customer Service Centre 13 10 50
DX 731 Sydney workcover.nsw.gov.au

05 AUG 2015

4 August 2015

Attention: David Walker
Douglas Partners Pty Ltd
PO BOX 472
West Ryde NSW 1685

Dear Mr Walker,

RE SITE: 14-20 Eldridge Rd Bankstown NSW

I refer to your site search request received by WorkCover NSW on 22 July 2015 requesting information on licences to keep dangerous goods for the above site.

A search of the Stored Chemical Information Database (SCID) and the microfiche records held by WorkCover NSW has not located any records pertaining to the above mentioned premises.

If you have any further queries please contact the Dangerous Goods Licensing Team on (02) 4321 5500.

Yours Sincerely


Brent Jones
Senior Licensing Officer
Dangerous Goods Team

Appendix H

Test Pit Logs & Test Bore Logs
Notes About this Report

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.4 AHD
EASTING:
NORTHING:

PIT No: 201
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

[illegible]

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BDI-27072015 is blind replicate of 0.3m to 0.4m

☐ Sand Penetrometer AS1289.6.3.3

☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.9 AHD
EASTING:
NORTHING:

PIT No: 202
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

[illegible]

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

- ☐ Sand Penetrometer AS1289.6.3.3
- ☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.8 AHD
EASTING:
NORTHING:

PIT No: 203
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
	0.08	ASPHALT										
		FILLING - brown, sandy clay filling with fine gravel and rootlets		D	0.1		PID<5					
					0.2							
		0.4m: colour change to light brown		D*	0.4		PID<5					
					0.5							
	0.6	SILTY CLAY - soft, orange and red, silty clay with some rootlets										
				D	0.7		PID<5					
					0.8							
	0.85	Pit discontinued at 0.85m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD2-27072015 is blind replicate of 0.4m to 0.5m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 20.4 AHD
EASTING:
NORTHING:

PIT No: 204
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
20.0	0.02	TOPSOIL - brown, silty clay topsoil and grass		D			PID<5					
		FILLING - brown, sandy clay filling with some fine gravel and rootlets			0.1							
					0.2							
	0.25	SILTY CLAY - soft, orange and red, silty clay with some rootlets		D			PID<5					
					0.6							
					0.7							
	0.75	Pit discontinued at 0.75m - target depth reached										
1												
10												

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

- ☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 20.6 AHD
EASTING:
NORTHING:

PIT No: 205
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

[illegible]

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD3-270715 is blind replicate of 0.15m to 0.2m

- ☐ Sand Penetrometer AS1289.6.3.3
- ☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



Douglas Partners
Geotechnics | Environment | Groundwater

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.9 AHD
EASTING:
NORTHING:

PIT No: 206
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

[illegible]

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

- ☐ Sand Penetrometer AS1289.6.3.3
- ☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U _t	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W _{seep}	Water seep
E	Environmental sample	W _{level}	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.7 AHD
EASTING:
NORTHING:

PIT No: 207
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

[illegible]

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD4-270715 is blind replicate of 0.1m to 0.2m

- ☐ Sand Penetrometer AS1289.6.3.3
- ☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
	Core drilling	W	Water sample
C	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.0 AHD
EASTING:
NORTHING:

PIT No: 208
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
19.0		ASPHALT										
	0.05	FILLING - dark grey, gravel roadbase										
	0.07	FILLING - light brown and orange, silty clay filling with some fine gravel and asphalt		D	0.1		PID<5					
	0.2	FILLING - orange and brown, silty clay filling		D	0.2		PID<5					
	0.3	FILLING - orange, red and light grey, silty clay filling with some fine to medium gravel			0.3							
				D	0.7		PID<5					
					0.8							
	0.85	SHALY CLAY - light grey, shaly clay			0.9		PID<5					
				D	1.0							
19.1	1.05	Pit discontinued at 1.05m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

- ☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.0 AHD
EASTING:
NORTHING:

PIT No: 209
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
19.03	0.03	ASPHALT GRAVEL AND GRASS										
19.08	0.08	FILLING - dark grey, gravel roadbase										
		FILLING - brown, silty clay filling with some fine to medium gravel (ironstone and asphalt) gravel and a brick fragment (0.5cm-1cm)		D	0.1		PID<5					
					0.2							
		0.3m: colour change to light brown and light orange		D*	0.3		PID<5					
					0.4							
	0.6	FILLING - orange and red, silty clay filling with some gravel										
				D	0.7		PID<5					
					0.8							
18.1	1.1	SHALY CLAY - soft, light grey, shaly clay		D	1.1		PID<5					
					1.2							
	1.25	Pit discontinued at 1.25m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD5-270715 is blind replicate of 0.3m to 0.4m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 18.9 AHD
EASTING:
NORTHING:

PIT No: 210
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
	0.1	FILLING - dark grey, gravel roadbase with some bricks and concrete										
		FILLING - light brown, clayey sand filling with fine to medium gravel, coarse concrete fragments (0.5-2cm) and brick fragments (0.5cm)		D	0.2		PID<5					
					0.3							
	0.4	SILTY CLAY - soft, orange and red, silty clay		D	0.4		PID<5					
					0.5							
	0.6	SHALY SILTY CLAY - soft, light grey and orange, shaley silty clay		D	0.6		PID<5					
					0.7							
	0.81	Pit discontinued at 0.81m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

- ☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U _s	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 18.9 AHD
EASTING:
NORTHING:

PIT No: 211
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
		FILLING - light brown and brown, fine to medium sand filling with some fine gravel, cobbles and brick fragments (0.2cm)		D	0.01 0.05		PID<5					
	0.2	FILLING - apparently well compacted, dark brown, sandy clay filling with some fine to medium gravel, medium to coarse basaltic asphalt and brick fragments (5cm-15cm)		D*	0.3 0.4		PID<5					
	0.5	SILTY CLAY - soft, orange, red and light grey, silty clay with some shale fragments										
				D	0.9 1.0		PID<5					
	1.1	Pit discontinued at 1.1m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *BD6-270715 is blind replicate of 0.3m to 0.4m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)

TEST PIT LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Residential Care Facility
LOCATION: 14 - 20 Eldridge Road, Bankstown

SURFACE LEVEL: 18.8 AHD
EASTING:
NORTHING:

PIT No: 212
PROJECT No: 72087.03
DATE: 27/7/2015
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
	0.02	ASPHALT										
		FILLING - grey and dark brown, gravel roadbase										
	0.2	SILTY CLAY - very soft, orange and red, silty clay										
					0.3		PID<5					
				D	0.4							
					0.9		PID<5					
		0.85m: color change to light grey orange and red with shale fragment		D	1.0							
	1.1	Pit discontinued at 1.1m - target depth reached										

RIG: 3.5T Yanmar Universal V:035

LOGGED: CB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.5 AHD
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 1
PROJECT No: 72087.01
DATE: 18/2/2011
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Degree of Weathering					Graphic Log	Rock Strength					Water	Fracture Spacing (m)	Discontinuities	Sampling & In Situ Testing				
			EW	HW	MW	SW	FS		FR	Ex Low	Very Low	Low	Medium				High	Very High	Ex High	B - Bedding S - Shear	J - Joint F - Fault
19.3	0.3	TOPSOIL - brown silty clay topsoil with a trace of rootlets																A			
19.1		CLAY - very stiff, orange brown clay with a trace of ironstone gravel, humid																A			
18.1	1.1	SILTSTONE - extremely low to very low strength, light grey siltstone with some high strength ironstone bands																A			4,10,22 N = 32
18.6	1.6																	S			
2.0		SILTSTONE - very low strength, highly weathered, fractured to slightly fractured, light grey and brown siltstone. Some sandstone laminations and bands. Some medium and high strength ironstone bands																			PL(A) = 0.2
17.2																		C	100	33	PL(A) = 1.5
3.0	2.9	LAMINITE - high then medium strength, moderately weathered, fractured and slightly fractured, brown laminite (sandstone/siltstone - 75:25). Some very low strength bands																			PL(A) = 1.2
4.0																					PL(A) = 0.8
5.1	5.1	LAMINITE - medium strength, fresh, slightly fractured, light grey and grey laminite (siltstone/sandstone - 60:40)																C	97	80	PL(A) = 0.8
6.05	6.1	6.05-6.10m: core left down hole Bore discontinued at 6.1m																			
13.0																					
7.0																					
12.0																					
8.0																					
11.0																					
9.0																					
10.0																					

RIG: Scout 4

DRILLER: R Kerney-Ennis

LOGGED: PAV/SI

CASING: HQ to 1.5m

TYPE OF BORING: Solid flight auger to 1.6m; NMLC-Coring to 6.1m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS:

SURVEY DATUM:

SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	G Gas sample	PID Photo ionisation detector (ppm)	
B Bulk sample	P Piston sample	PL(A) Point load axial test Is(50) (MPa)	
BLK Block sample	U Tube sample (x mm dia.)	PL(D) Point load diametral test Is(50) (MPa)	
C Core drilling	W Water sample	pp Pocket penetrometer (kPa)	
D Disturbed sample	W Water seep	S Standard penetration test	
E Environmental sample	W Water level	V Shear vane (kPa)	

BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 20.6 AHD
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: 2
PROJECT No: 72087.01
DATE: 18/2/2011
SHEET 1 OF 1

[illegible]

RIG: Scout 4

DRILLER: R Kerney-Ennis

LOGGED: PAV

CASING: Uncased

TYPE OF BORING: Solid flight auger to 1.4m

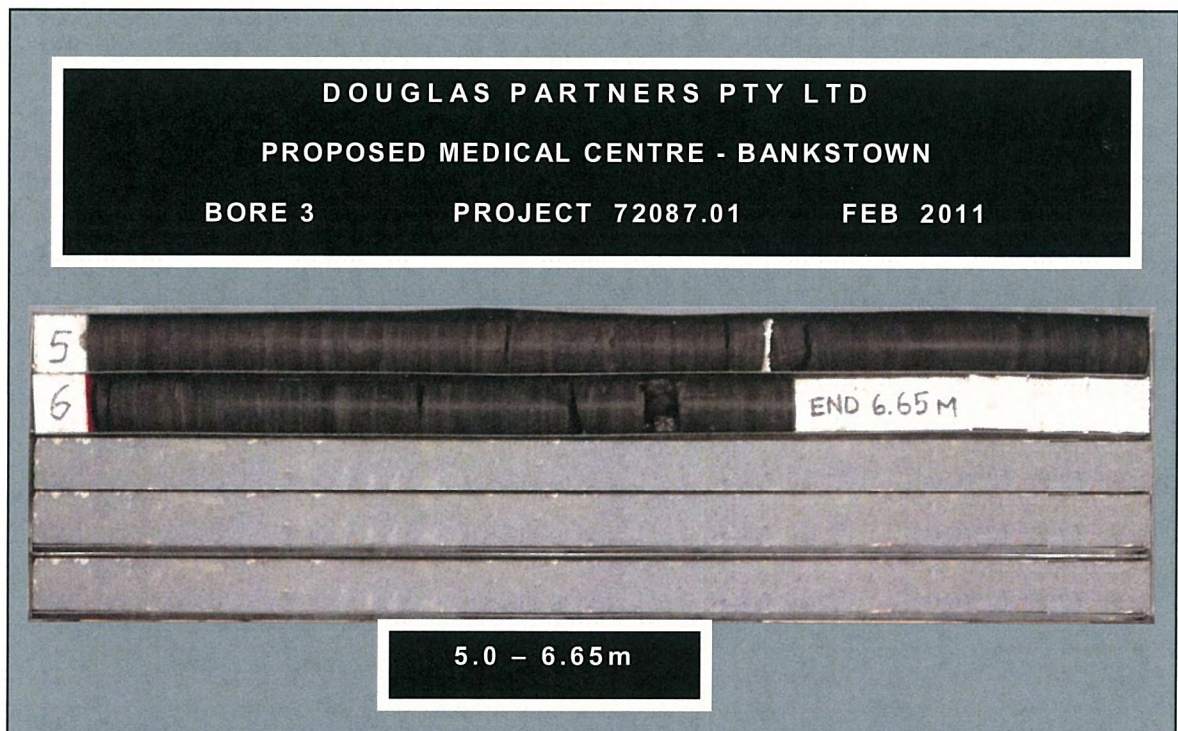
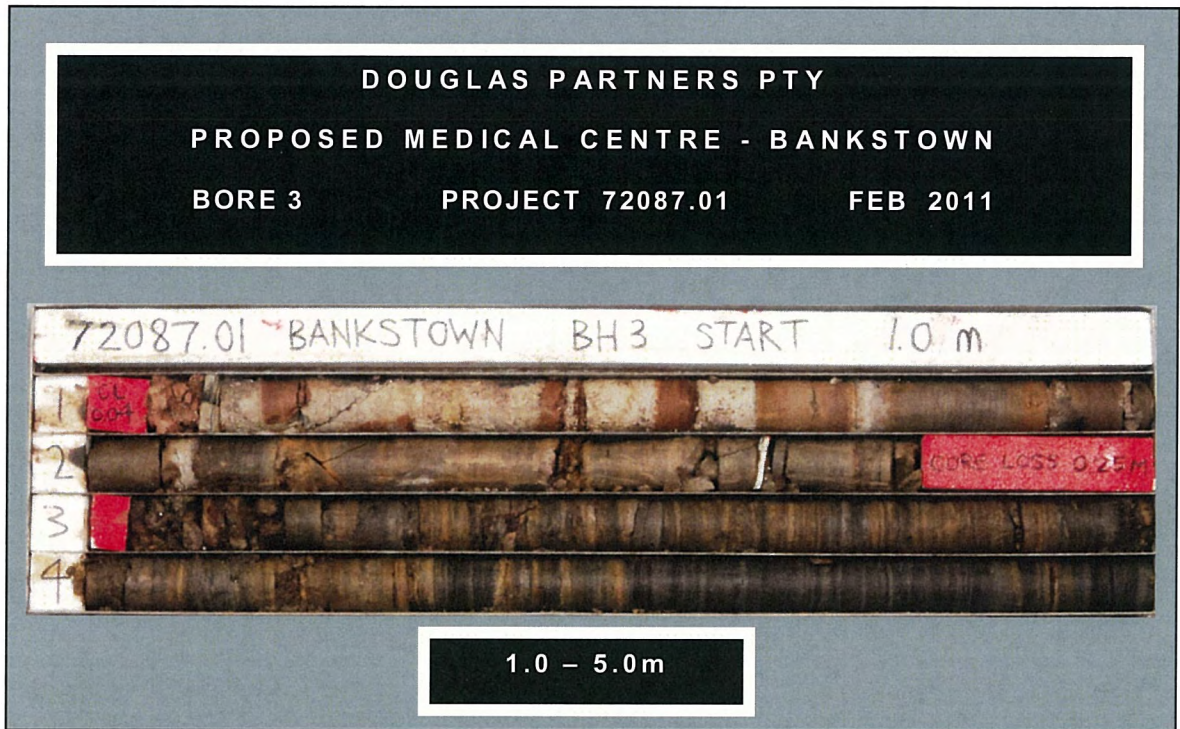
WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS:

SURVEY DATUM:

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)





BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.4 AHD
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 3
PROJECT No: 72087.01
DATE: 18/2/2011
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Degree of Weathering				Graphic Log	Rock Strength					Water	Fracture Spacing (m)	Discontinuities		Sampling & In Situ Testing				
			EW	HW	MW	SW		FS	FR	Ex Low	Very Low	Low			Medium	High	Very High	Ex High	B - Bedding S - Shear	J - Joint F - Fault	Type
19	0.03	ASPHALTIC CONCRETE													Note: Unless otherwise stated, rock is fractured along rough planar bedding dipping 0°- 10°						
	0.13	ROADBASE																A			
	0.6	CLAY - hard, grey and orange brown clay with some ironstone gravel, humid																A			
1	1.0	SILTSTONE - extremely low to very low strength, light grey, fine grained siltstone with high strength ironstone bands													1m: CORE LOSS: 40mm 1.2m: J55°, cly, co 1.47m: B0°, fe, Ds (80mm) 1.58m: B0°, Ds (50mm) 1.72m: B0°, Ds (15mm) 1.9m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm) 2.08m: B0°, Ds (10mm), J, sv, cu, ro, fe 2.18m: B0°, fe, Ds (15mm) 1.97m: B0°, Ds (5mm)						

RIG: Scout 4

DRILLER: R Kerney-Ennis

LOGGED: PAV/SI

CASING: HQ to 1.0m

TYPE OF BORING: Solid flight auger to 1.0m; NMLC-Coring to 6.6m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS:

SURVEY DATUM:

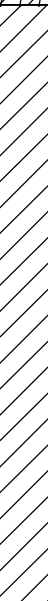
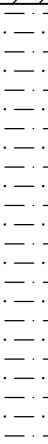
SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	G Gas sample	PID Photo ionisation detector (ppm)	
B Bulk sample	P Piston sample	PL(A) Point load axial test Is(50) (MPa)	
BLK Block sample	U Tube sample (x mm dia.)	PL(D) Point load diametral test Is(50) (MPa)	
C Core drilling	W Water sample	pp Pocket penetrometer (kPa)	
D Disturbed sample	W Water seep	S Standard penetration test	
E Environmental sample	W Water level	V Shear vane (kPa)	

BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 20.2 AHD*
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: 101
PROJECT No: 72087.02
DATE: 12/2/2013
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
		TOPSOIL - brown, silty clay topsoil, humid		A	0.0					
					0.1					
	0.3	CLAY -apparently very stiff, orange-brown clay with a trace of ironstone gravel, humid		A	0.4					
					0.5					
	1				1.0					
	1.1	SILTSTONE - extremely low to very low strength, light grey and orange brown siltstone with some high strength ironstone bands		S			5,30/130 refusal			
					1.3					
					1.5					
				A						
	1.7	Bore discontinued at 1.7m T.C. bit refusal			1.7					

RIG: Bobcat

DRILLER: SY

LOGGED: AG

CASING: Uncased

TYPE OF BORING: Solid flight auger to 1.7m

WATER OBSERVATIONS: No free groundwater observed whilst drilling

REMARKS: *Surface level interpolated from Survey Plan by Lean, Lackenby and Hayward, Drawing No. 58653LD, dated 07/04/06

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater

BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.0 AHD*
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: 102
PROJECT No: 72087.02
DATE: 12/2/2013
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
+0	0.1	FILLING - yellow-brown, brown and grey fine to medium grained sand filling with some sandstone gravel, basalt gravel and concrete fragments, humid		A	0.0					
				0.05						
		A		0.1						
				0.2						
	0.4	FILLING - brown and grey-brown clay filling with some fine to medium grained sand, sandstone gravel and basalt gravel, humid			0.2					
	0.8	CLAY - apparently very stiff, mottled orange brown, red brown and grey clay with a trace of ironstone gravel, humid								
		A		0.5						
				0.6						
1.3	SILTSTONE - extremely low to very low strength, light grey and orange brown siltstone with some high strength ironstone bands									
	A		1.0							
			1.2							
-0	1	Bore discontinued at 1.3m T.C. bit refusal								

RIG: Bobcat

DRILLER: SY

LOGGED: AG

CASING: Uncased

TYPE OF BORING: Solid flight auger to 1.3m

WATER OBSERVATIONS: No free groundwater observed whilst drilling

REMARKS: *Surface level interpolated from Survey Plan by Lean, Lackenby and Hayward, Drawing No. 58653LD, dated 07/04/06

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)



Douglas Partners
 Geotechnics | Environment | Groundwater



BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 18.8 AHD*
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: 103
PROJECT No: 72087.02
DATE: 13/2/2013
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.05	ASPHALTIC CONCRETE		A	0.1					
	0.2	ROADBASE - roadbase gravel		A	0.5					
	0.8	CLAY - apparently stiff to very stiff, orange brown clay with trace of ironstone gravel		A	1.0		20/30 refusal			
	1	SILTSTONE - very low strength, light grey siltstone		A	1.3					
	1.5			S	1.5					
	1.68	SILTSTONE - high then low to medium strength, highly to moderately weathered, fragmented to fractured and slightly fractured, light grey brown siltstone with some extremely and very low strength bands		C	1.78		PL(A) = 2.3			
	2			C	2.3		PL(A) = 0.3			
	3			C	3.2					
	3.53			C	4.05		PL(A) = 0.3			
	4			C	4.6		PL(A) = 1			
	4.4	SILTSTONE - medium strength, fresh, slightly fractured, grey siltstone		C	5.2		PL(A) = 0.9			
	5			C	6.15		PL(A) = 1.9			
	6	LAMINITE - high strength, fresh, slightly fractured grey laminite with approx. 20% fine grained sandstone laminations			6.3					
	6.3	Bore discontinued at 6.3m -Limit of investigation								
	7									
	8									
	9									

RIG: Bobcat

DRILLER: SY

LOGGED: SI

CASING: HW to 1.0m

TYPE OF BORING: Solid flight auger to 1.0m; Rotary to 1.5m; NMLC coring to 6.3m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: *Surface level interpolated from Survey Plan by Lean, Lackenby and Hayward, Drawing No. 58653LD, dated 07/04/06

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

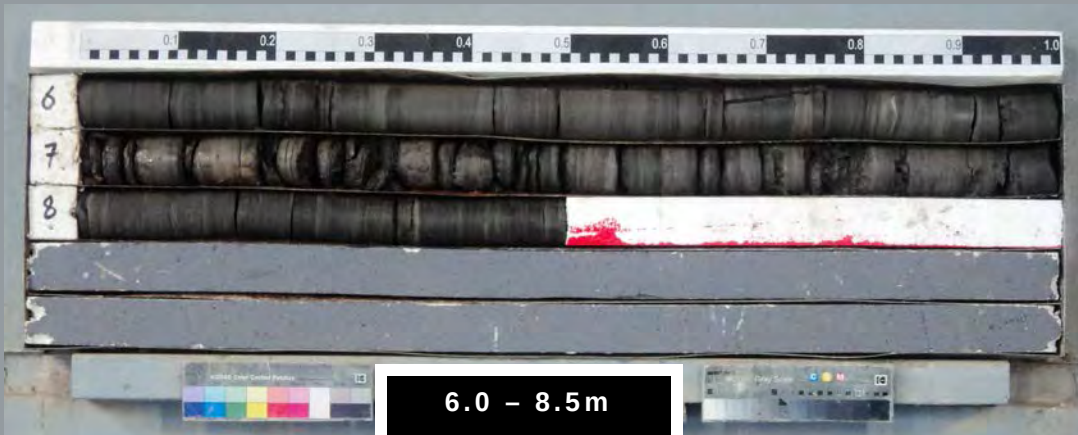


Douglas Partners
 Geotechnics | Environment | Groundwater

DOUGLAS PARTNERS PTY LTD
BANKSTOWN MEDICAL CENTRE - BANKSTOWN
BORE 104 PROJECT 72087.02 FEB 2013



DOUGLAS PARTNERS PTY LTD
BANKSTOWN MEDICAL CENTRE - BANKSTOWN
BORE 104 PROJECT 72087.02 FEB 2013



BOREHOLE LOG

CLIENT: Hansen Yuncken Pty Ltd
PROJECT: Proposed Medical Centre
LOCATION: 14-20 Eldridge Road, Bankstown

SURFACE LEVEL: 19.0 AHD*
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: 104
PROJECT No: 72087.02
DATE: 12/2/2013
SHEET 1 OF 1

[illegible]

RIG: Bobcat

DRILLER: SY

LOGGED: AG/SI

CASING: HW to 1.7m

TYPE OF BORING: Solid flight auger to 1.7m; NMLC coring to 8.5m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: *Surface level interpolated from Survey Plan by Lean, Lackenby and Hayward, Drawing No. 58653LD, dated 07/04/06

SAMPLING & IN SITU TESTING LEGEND

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U _t	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W _s	Water seep
E	Environmental sample	W _l	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test ts(50) (MPa)
		PL(D)	Point load diametral test ts(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



Douglas Partners
Geotechnics | Environment | Groundwater

About this Report

Douglas Partners



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.



Sampling

Sampling is carried out during drilling or test pitting to allow engineering examination (and laboratory testing where required) of the soil or rock.

Disturbed samples taken during drilling provide information on colour, type, inclusions and, depending upon the degree of disturbance, some information on strength and structure.

Undisturbed samples are taken by pushing a thin-walled sample tube into the soil and withdrawing it to obtain a sample of the soil in a relatively undisturbed state. Such samples yield information on structure and strength, and are necessary for laboratory determination of shear strength and compressibility. Undisturbed sampling is generally effective only in cohesive soils.

Test Pits

Test pits are usually excavated with a backhoe or an excavator, allowing close examination of the in-situ soil if it is safe to enter into the pit. The depth of excavation is limited to about 3 m for a backhoe and up to 6 m for a large excavator. A potential disadvantage of this investigation method is the larger area of disturbance to the site.

Large Diameter Augers

Boreholes can be drilled using a rotating plate or short spiral auger, generally 300 mm or larger in diameter commonly mounted on a standard piling rig. The cuttings are returned to the surface at intervals (generally not more than 0.5 m) and are disturbed but usually unchanged in moisture content. Identification of soil strata is generally much more reliable than with continuous spiral flight augers, and is usually supplemented by occasional undisturbed tube samples.

Continuous Spiral Flight Augers

The borehole is advanced using 90-115 mm diameter continuous spiral flight augers which are withdrawn at intervals to allow sampling or in-situ testing. This is a relatively economical means of drilling in clays and sands above the water table. Samples are returned to the surface, or may be collected after withdrawal of the auger flights, but they are disturbed and may be mixed with soils from the sides of the hole. Information from the drilling (as distinct from specific sampling by SPTs or undisturbed samples) is of relatively low

reliability, due to the remoulding, possible mixing or softening of samples by groundwater.

Non-core Rotary Drilling

The borehole is advanced using a rotary bit, with water or drilling mud being pumped down the drill rods and returned up the annulus, carrying the drill cuttings. Only major changes in stratification can be determined from the cuttings, together with some information from the rate of penetration. Where drilling mud is used this can mask the cuttings and reliable identification is only possible from separate sampling such as SPTs.

Continuous Core Drilling

A continuous core sample can be obtained using a diamond tipped core barrel, usually with a 50 mm internal diameter. Provided full core recovery is achieved (which is not always possible in weak rocks and granular soils), this technique provides a very reliable method of investigation.

Standard Penetration Tests

Standard penetration tests (SPT) are used as a means of estimating the density or strength of soils and also of obtaining a relatively undisturbed sample. The test procedure is described in Australian Standard 1289, Methods of Testing Soils for Engineering Purposes - Test 6.3.1.

The test is carried out in a borehole by driving a 50 mm diameter split sample tube under the impact of a 63 kg hammer with a free fall of 760 mm. It is normal for the tube to be driven in three successive 150 mm increments and the 'N' value is taken as the number of blows for the last 300 mm. In dense sands, very hard clays or weak rock, the full 450 mm penetration may not be practicable and the test is discontinued.

The test results are reported in the following form.

- In the case where full penetration is obtained with successive blow counts for each 150 mm of, say, 4, 6 and 7 as:
4,6,7
N=13
- In the case where the test is discontinued before the full penetration depth, say after 15 blows for the first 150 mm and 30 blows for the next 40 mm as:
15, 30/40 mm

Sampling Methods

The results of the SPT tests can be related empirically to the engineering properties of the soils.

Dynamic Cone Penetrometer Tests / Perth Sand Penetrometer Tests

Dynamic penetrometer tests (DCP or PSP) are carried out by driving a steel rod into the ground using a standard weight of hammer falling a specified distance. As the rod penetrates the soil the number of blows required to penetrate each successive 150 mm depth are recorded. Normally there is a depth limitation of 1.2 m, but this may be extended in certain conditions by the use of extension rods. Two types of penetrometer are commonly used.

- Perth sand penetrometer - a 16 mm diameter flat ended rod is driven using a 9 kg hammer dropping 600 mm (AS 1289, Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.
- Cone penetrometer - a 16 mm diameter rod with a 20 mm diameter cone end is driven using a 9 kg hammer dropping 510 mm (AS 1289, Test 6.3.2). This test was developed initially for pavement subgrade investigations, and correlations of the test results with California Bearing Ratio have been published by various road authorities.



Description and Classification Methods

The methods of description and classification of soils and rocks used in this report are based on Australian Standard AS 1726, Geotechnical Site Investigations Code. In general, the descriptions include strength or density, colour, structure, soil or rock type and inclusions.

Soil Types

Soil types are described according to the predominant particle size, qualified by the grading of other particles present:

Type	Particle size (mm)
Boulder	>200
Cobble	63 - 200
Gravel	2.36 - 63
Sand	0.075 - 2.36
Silt	0.002 - 0.075
Clay	<0.002

The sand and gravel sizes can be further subdivided as follows:

Type	Particle size (mm)
Coarse gravel	20 - 63
Medium gravel	6 - 20
Fine gravel	2.36 - 6
Coarse sand	0.6 - 2.36
Medium sand	0.2 - 0.6
Fine sand	0.075 - 0.2

The proportions of secondary constituents of soils are described as:

Term	Proportion	Example
And	Specify	Clay (60%) and Sand (40%)
Adjective	20 - 35%	Sandy Clay
Slightly	12 - 20%	Slightly Sandy Clay
With some	5 - 12%	Clay with some sand
With a trace of	0 - 5%	Clay with a trace of sand

Definitions of grading terms used are:

- Well graded - a good representation of all particle sizes
- Poorly graded - an excess or deficiency of particular sizes within the specified range
- Uniformly graded - an excess of a particular particle size
- Gap graded - a deficiency of a particular particle size with the range

Cohesive Soils

Cohesive soils, such as clays, are classified on the basis of undrained shear strength. The strength may be measured by laboratory testing, or estimated by field tests or engineering examination. The strength terms are defined as follows:

Description	Abbreviation	Undrained shear strength (kPa)
Very soft	vs	<12
Soft	s	12 - 25
Firm	f	25 - 50
Stiff	st	50 - 100
Very stiff	vst	100 - 200
Hard	h	>200

Cohesionless Soils

Cohesionless soils, such as clean sands, are classified on the basis of relative density, generally from the results of standard penetration tests (SPT), cone penetration tests (CPT) or dynamic penetrometers (PSP). The relative density terms are given below:

Relative Density	Abbreviation	SPT N value	CPT qc value (MPa)
Very loose	vl	<4	<2
Loose	l	4 - 10	2 - 5
Medium dense	md	10 - 30	5 - 15
Dense	d	30 - 50	15 - 25
Very dense	vd	>50	>25

Soil Descriptions

Soil Origin

It is often difficult to accurately determine the origin of a soil. Soils can generally be classified as:

- Residual soil - derived from in-situ weathering of the underlying rock;
- Transported soils - formed somewhere else and transported by nature to the site; or
- Filling - moved by man.

Transported soils may be further subdivided into:

- Alluvium - river deposits
- Lacustrine - lake deposits
- Aeolian - wind deposits
- Littoral - beach deposits
- Estuarine - tidal river deposits
- Talus - scree or coarse colluvium
- Slopewash or Colluvium - transported downslope by gravity assisted by water. Often includes angular rock fragments and boulders.



Rock Strength

Rock strength is defined by the Point Load Strength Index ($IS_{(50)}$) and refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects. The test procedure is described by Australian Standard 4133.4.1 - 1993. The terms used to describe rock strength are as follows:

Term	Abbreviation	Point Load Index $IS_{(50)}$ MPa	Approx Unconfined Compressive Strength MPa*
Extremely low	EL	<0.03	<0.6
Very low	VL	0.03 - 0.1	0.6 - 2
Low	L	0.1 - 0.3	2 - 6
Medium	M	0.3 - 1.0	6 - 20
High	H	1 - 3	20 - 60
Very high	VH	3 - 10	60 - 200
Extremely high	EH	>10	>200

* Assumes a ratio of 20:1 for UCS to $IS_{(50)}$

Degree of Weathering

The degree of weathering of rock is classified as follows:

Term	Abbreviation	Description
Extremely weathered	EW	Rock substance has soil properties, i.e. it can be remoulded and classified as a soil but the texture of the original rock is still evident.
Highly weathered	HW	Limonite staining or bleaching affects whole of rock substance and other signs of decomposition are evident. Porosity and strength may be altered as a result of iron leaching or deposition. Colour and strength of original fresh rock is not recognisable
Moderately weathered	MW	Staining and discolouration of rock substance has taken place
Slightly weathered	SW	Rock substance is slightly discoloured but shows little or no change of strength from fresh rock
Fresh stained	Fs	Rock substance unaffected by weathering but staining visible along defects
Fresh	Fr	No signs of decomposition or staining

Degree of Fracturing

The following classification applies to the spacing of natural fractures in diamond drill cores. It includes bedding plane partings, joints and other defects, but excludes drilling breaks.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with some fragments
Fractured	Core lengths of 40-200 mm with some shorter and longer sections
Slightly Fractured	Core lengths of 200-1000 mm with some shorter and longer sections
Unbroken	Core lengths mostly > 1000 mm

Rock Descriptions

Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$\text{RQD \%} = \frac{\text{cumulative length of 'sound' core sections} \geq 100 \text{ mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or better. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e. drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

Stratification Spacing

For sedimentary rocks the following terms may be used to describe the spacing of bedding partings:

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

Symbols & Abbreviations

Douglas Partners



Introduction

These notes summarise abbreviations commonly used on borehole logs and test pit reports.

Drilling or Excavation Methods

C	Core Drilling
R	Rotary drilling
SFA	Spiral flight augers
NMLC	Diamond core - 52 mm dia
NQ	Diamond core - 47 mm dia
HQ	Diamond core - 63 mm dia
PQ	Diamond core - 81 mm dia

Water

▷	Water seep
▽	Water level

Sampling and Testing

A	Auger sample
B	Bulk sample
D	Disturbed sample
E	Environmental sample
U ₅₀	Undisturbed tube sample (50mm)
W	Water sample
pp	pocket penetrometer (kPa)
PID	Photo ionisation detector
PL	Point load strength Is(50) MPa
S	Standard Penetration Test
V	Shear vane (kPa)

Description of Defects in Rock

The abbreviated descriptions of the defects should be in the following order: Depth, Type, Orientation, Coating, Shape, Roughness and Other. Drilling and handling breaks are not usually included on the logs.

Defect Type

B	Bedding plane
Cs	Clay seam
Cv	Cleavage
Cz	Crushed zone
Ds	Decomposed seam
F	Fault
J	Joint
Lam	lamination
Pt	Parting
Sz	Sheared Zone
V	Vein

Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

h	horizontal
v	vertical
sh	sub-horizontal
sv	sub-vertical

Coating or Infilling Term

cln	clean
co	coating
he	healed
inf	infilled
stn	stained
ti	tight
vn	veneer

Coating Descriptor

ca	calcite
cbs	carbonaceous
cly	clay
fe	iron oxide
mn	manganese
slt	silty

Shape

cu	curved
ir	irregular
pl	planar
st	stepped
un	undulating

Roughness

po	polished
ro	rough
sl	slickensided
sm	smooth
vr	very rough

Other

fg	fragmented
bnd	band
qtz	quartz

Symbols & Abbreviations

Graphic Symbols for Soil and Rock

General



Asphalt



Road base



Concrete



Filling

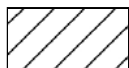
Soils



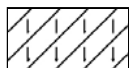
Topsoil



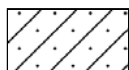
Peat



Clay



Silty clay



Sandy clay



Gravelly clay



Shaly clay



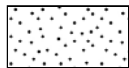
Silt



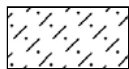
Clayey silt



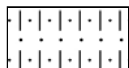
Sandy silt



Sand



Clayey sand



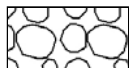
Silty sand



Gravel



Sandy gravel

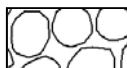


Cobbles, boulders



Talus

Sedimentary Rocks



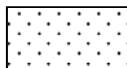
Boulder conglomerate



Conglomerate



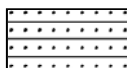
Conglomeratic sandstone



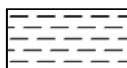
Sandstone



Siltstone



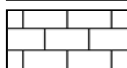
Laminite



Mudstone, claystone, shale

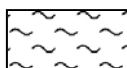


Coal

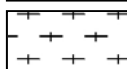


Limestone

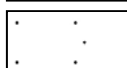
Metamorphic Rocks



Slate, phyllite, schist

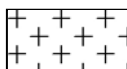


Gneiss

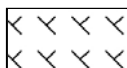


Quartzite

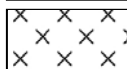
Igneous Rocks



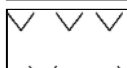
Granite



Dolerite, basalt, andesite



Dacite, epidote



Tuff, breccia



Porphyry

Appendix I

Laboratory Certificates and
Chain of Custody

CERTIFICATE OF ANALYSIS

131837

Client:

Douglas Partners Pty Ltd
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Christopher Bagia, Dave Walker

Sample log in details:

Your Reference:	72087.03, Bankstown
No. of samples:	17 soils
Date samples received / completed instructions received	28/07/15 / 28/07/15

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:	4/08/15 / 4/08/15
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	131837-1	131837-2	131837-3	131837-4	131837-5
Your Reference	-----	TP201	TP203	TP207	TP208	TP209
Depth	-----	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	30/07/2015	30/07/2015	30/07/2015
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	%	91	101	99	99	94

vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	131837-6	131837-7	131837-8	131837-9	131837-10
Your Reference	-----	TP210	TP211	SP2	TP202	TP204
Depth	-----	0.2-0.3	0.3-0.4	-	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
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	%	99	104	98	103	100

vTRH(C6-C10)/BTEXN in Soil	UNITS	131837-11	131837-12	131837-13	131837-14	131837-15
Our Reference:	-----	TP205	TP206	SP1	TP206	TP212
Your Reference	-----	0.05-0.1	0.1-0.2	-	0.7-0.8	0.3-0.4
Depth		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
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	%	99	100	104	99	105

vTRH(C6-C10)/BTEXN in Soil	UNITS	131837-16	131837-17
Our Reference:	-----	SP3	BD4/270715
Your Reference	-----	-	-
Depth		27/07/2015	27/07/2015
Date Sampled		Soil	Soil
Type of sample			
Date extracted	-	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015
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	%	95	103

svTRH (C10-C40) in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-1 TP201 0.1-0.2 27/07/2015 Soil	131837-2 TP203 0.1-0.2 27/07/2015 Soil	131837-3 TP207 0.1-0.2 27/07/2015 Soil	131837-4 TP208 0.1-0.2 27/07/2015 Soil	131837-5 TP209 0.1-0.2 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<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	<100	<100	120	<100	140
TRH>C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	108	104	110	102	108

svTRH (C10-C40) in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-6 TP210 0.2-0.3 27/07/2015 Soil	131837-7 TP211 0.3-0.4 27/07/2015 Soil	131837-8 SP2 - 27/07/2015 Soil	131837-9 TP202 0.1-0.2 27/07/2015 Soil	131837-10 TP204 0.1-0.2 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	130	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	100	<100	<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	<100	210	<100	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	108	106	106	103	104

svTRH (C10-C40) in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-11 TP205 0.05-0.1 27/07/2015 Soil	131837-12 TP206 0.1-0.2 27/07/2015 Soil	131837-13 SP1 - 27/07/2015 Soil	131837-14 TP206 0.7-0.8 27/07/2015 Soil	131837-15 TP212 0.3-0.4 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<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	<100	<100	<100	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	107	104	106	106	106

svTRH (C10-C40) in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-16 SP3 - 27/07/2015 Soil	131837-17 BD4/270715 - 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015
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	%	107	106

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-1 TP201 0.1-0.2 27/07/2015 Soil	131837-2 TP203 0.1-0.2 27/07/2015 Soil	131837-3 TP207 0.1-0.2 27/07/2015 Soil	131837-4 TP208 0.1-0.2 27/07/2015 Soil	131837-5 TP209 0.1-0.2 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	0.1	<0.1	0.2
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Phenanthrene	mg/kg	<0.1	<0.1	0.1	<0.1	2.4
Anthracene	mg/kg	<0.1	<0.1	0.3	<0.1	0.9
Fluoranthene	mg/kg	<0.1	<0.1	0.6	0.2	6.4
Pyrene	mg/kg	0.1	<0.1	0.7	0.2	6.0
Benzo(a)anthracene	mg/kg	<0.1	<0.1	0.3	<0.1	2.5
Chrysene	mg/kg	<0.1	<0.1	0.5	0.1	2.4
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	0.9	0.4	5.3
Benzo(a)pyrene	mg/kg	0.07	<0.05	0.4	0.1	3.3
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.3	0.1	2.0
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.3	0.1	1.9
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	0.6	<0.5	4.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	0.6	<0.5	4.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	0.7	<0.5	4.6
Total Positive PAHs	mg/kg	0.19	NIL(+)VE	4.6	1.3	34
Surrogate p-Terphenyl-d14	%	123	121	118	119	120

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-6 TP210 0.2-0.3 27/07/2015 Soil	131837-7 TP211 0.3-0.4 27/07/2015 Soil	131837-8 SP2 - 27/07/2015 Soil	131837-9 TP202 0.1-0.2 27/07/2015 Soil	131837-10 TP204 0.1-0.2 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
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	0.5	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	0.5	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.4	6.4	0.2	<0.1	<0.1
Anthracene	mg/kg	0.2	2.0	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	1.3	14	0.3	<0.1	<0.1
Pyrene	mg/kg	1.3	12	0.3	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.6	4.8	0.1	<0.1	<0.1
Chrysene	mg/kg	0.5	4.4	0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	1	8.5	0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.60	5.4	0.1	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.3	3.0	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	0.4	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3	2.7	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.8	7.6	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.8	7.6	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.9	7.6	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	6.6	65	1.4	NIL(+)/VE	NIL(+)/VE
Surrogate p-Terphenyl-d14	%	120	115	122	123	123

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-11 TP205 0.05-0.1 27/07/2015 Soil	131837-12 TP206 0.1-0.2 27/07/2015 Soil	131837-13 SP1 - 27/07/2015 Soil	131837-14 TP206 0.7-0.8 27/07/2015 Soil	131837-15 TP212 0.3-0.4 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
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	0.4	0.4	<0.1	<0.1
Anthracene	mg/kg	<0.1	0.1	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	1.1	0.7	<0.1	<0.1
Pyrene	mg/kg	0.1	1	0.6	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.4	0.2	<0.1	<0.1
Chrysene	mg/kg	<0.1	0.4	0.3	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.7	0.4	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.07	0.4	0.3	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.3	0.2	<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	0.2	0.2	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	0.6	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	0.6	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	0.7	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	0.47	5.1	3.5	NIL(+)/VE	NIL(+)/VE
Surrogate p-Terphenyl-d14	%	114	115	113	117	120

PAHs in Soil		
Our Reference:	UNITS	131837-16
Your Reference	-----	SP3
Depth	-----	-
Date Sampled		27/07/2015
Type of sample		Soil
Date extracted	-	29/07/2015
Date analysed	-	30/07/2015
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.5
Anthracene	mg/kg	0.1
Fluoranthene	mg/kg	0.9
Pyrene	mg/kg	0.9
Benzo(a)anthracene	mg/kg	0.3
Chrysene	mg/kg	0.3
Benzo(b,j+k)fluoranthene	mg/kg	0.5
Benzo(a)pyrene	mg/kg	0.3
Indeno(1,2,3-c,d)pyrene	mg/kg	0.3
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5
Total Positive PAHs	mg/kg	4.5
Surrogate p-Terphenyl-d14	%	113

Organochlorine Pesticides in soil						
Our Reference:	UNITS	131837-1	131837-2	131837-3	131837-4	131837-5
Your Reference	-----	TP201	TP203	TP207	TP208	TP209
Depth	-----	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
HCBC	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	%	111	111	114	111	112

Organochlorine Pesticides in soil				
Our Reference:	UNITS	131837-6	131837-7	131837-8
Your Reference	-----	TP210	TP211	SP2
Depth	-----	0.2-0.3	0.3-0.4	-
Date Sampled		27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	0.7	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	112	110	110

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-1 TP201 0.1-0.2 27/07/2015 Soil	131837-2 TP203 0.1-0.2 27/07/2015 Soil	131837-3 TP207 0.1-0.2 27/07/2015 Soil	131837-4 TP208 0.1-0.2 27/07/2015 Soil	131837-5 TP209 0.1-0.2 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	0.1	0.3	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	111	111	114	111	112

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-6 TP210 0.2-0.3 27/07/2015 Soil	131837-7 TP211 0.3-0.4 27/07/2015 Soil	131837-8 SP2 - 27/07/2015 Soil
Date extracted	-	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	110	110

Acid Extractable metals in soil						
Our Reference:	UNITS	131837-1	131837-2	131837-3	131837-4	131837-5
Your Reference	-----	TP201	TP203	TP207	TP208	TP209
Depth	-----	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Arsenic	mg/kg	8	7	8	9	5
Cadmium	mg/kg	0.4	0.7	<0.4	<0.4	<0.4
Chromium	mg/kg	11	14	11	13	15
Copper	mg/kg	32	22	62	93	140
Lead	mg/kg	78	69	93	73	140
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	6	10	6	19
Zinc	mg/kg	200	190	49	77	120

Acid Extractable metals in soil						
Our Reference:	UNITS	131837-6	131837-7	131837-8	131837-9	131837-10
Your Reference	-----	TP210	TP211	SP2	TP202	TP204
Depth	-----	0.2-0.3	0.3-0.4	-	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Arsenic	mg/kg	<4	9	8	14	13
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	7	14	7	20	18
Copper	mg/kg	18	160	39	8	5
Lead	mg/kg	14	180	16	29	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	9	32	5	4
Zinc	mg/kg	26	90	110	68	9

Acid Extractable metals in soil						
Our Reference:	UNITS	131837-11	131837-12	131837-13	131837-14	131837-15
Your Reference	-----	TP205	TP206	SP1	TP206	TP212
Depth	-----	0.05-0.1	0.1-0.2	-	0.7-0.8	0.3-0.4
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Arsenic	mg/kg	10	11	8	13	6
Cadmium	mg/kg	<0.4	1	<0.4	<0.4	<0.4
Chromium	mg/kg	13	17	8	14	10
Copper	mg/kg	12	21	35	9	13
Lead	mg/kg	41	51	16	9	10
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	3	6	21	2	2
Zinc	mg/kg	39	140	89	17	14

Acid Extractable metals in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-16 SP3 - 27/07/2015 Soil	131837-17 BD4/270715 - 27/07/2015 Soil	131837-18 TP205 - TRIPLICATE 0.05-0.1 27/07/2015 Soil
Date digested	-	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015
Arsenic	mg/kg	12	20	9
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	13	25	12
Copper	mg/kg	40	12	14
Lead	mg/kg	19	22	45
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	18	6	3
Zinc	mg/kg	120	52	40

Misc Soil - Inorg Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-1 TP201 0.1-0.2 27/07/2015 Soil	131837-2 TP203 0.1-0.2 27/07/2015 Soil	131837-3 TP207 0.1-0.2 27/07/2015 Soil	131837-4 TP208 0.1-0.2 27/07/2015 Soil	131837-5 TP209 0.1-0.2 27/07/2015 Soil
Date prepared	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-6 TP210 0.2-0.3 27/07/2015 Soil	131837-7 TP211 0.3-0.4 27/07/2015 Soil	131837-8 SP2 - 27/07/2015 Soil
Date prepared	-	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	29/07/2015	29/07/2015	29/07/2015
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5

Moisture						
Our Reference:	UNITS	131837-1	131837-2	131837-3	131837-4	131837-5
Your Reference	-----	TP201	TP203	TP207	TP208	TP209
Depth	-----	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
Moisture	%	14	13	7.6	14	12

Moisture						
Our Reference:	UNITS	131837-6	131837-7	131837-8	131837-9	131837-10
Your Reference	-----	TP210	TP211	SP2	TP202	TP204
Depth	-----	0.2-0.3	0.3-0.4	-	0.1-0.2	0.1-0.2
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
Moisture	%	14	11	11	13	12

Moisture						
Our Reference:	UNITS	131837-11	131837-12	131837-13	131837-14	131837-15
Your Reference	-----	TP205	TP206	SP1	TP206	TP212
Depth	-----	0.05-0.1	0.1-0.2	-	0.7-0.8	0.3-0.4
Date Sampled		27/07/2015	27/07/2015	27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2015	29/07/2015	29/07/2015	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015	30/07/2015	30/07/2015
Moisture	%	21	8.0	9.7	21	18

Moisture			
Our Reference:	UNITS	131837-16	131837-17
Your Reference	-----	SP3	BD4/270715
Depth	-----	-	-
Date Sampled		27/07/2015	27/07/2015
Type of sample		Soil	Soil
Date prepared	-	29/07/2015	29/07/2015
Date analysed	-	30/07/2015	30/07/2015
Moisture	%	17	17

Asbestos ID - soils Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-1 TP201 0.1-0.2 27/07/2015 Soil	131837-2 TP203 0.1-0.2 27/07/2015 Soil	131837-3 TP207 0.1-0.2 27/07/2015 Soil	131837-4 TP208 0.1-0.2 27/07/2015 Soil	131837-5 TP209 0.1-0.2 27/07/2015 Soil
Date analysed	-	31/07/2015	31/07/2015	31/07/2015	31/07/2015	31/07/2015
Sample mass tested	g	Approx 35g	Approx 45g	Approx 40g	Approx 40g	Approx 45g
Sample Description	-	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	131837-6 TP210 0.2-0.3 27/07/2015 Soil	131837-7 TP211 0.3-0.4 27/07/2015 Soil	131837-8 SP2 - 27/07/2015 Soil	131837-9 TP202 0.1-0.2 27/07/2015 Soil	131837-10 TP204 0.1-0.2 27/07/2015 Soil
Date analysed	-	31/07/2015	31/07/2015	31/07/2015	31/07/2015	31/07/2015
Sample mass tested	g	Approx 35g	Approx 40g	Approx 50g	Approx 45g	Approx 40g
Sample Description	-	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils				
Our Reference:	UNITS	131837-11	131837-12	131837-13
Your Reference	-----	TP205	TP206	SP1
Depth	-----	0.05-0.1	0.1-0.2	-
Date Sampled		27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil
Date analysed	-	31/07/2015	31/07/2015	31/07/2015
Sample mass tested	g	Approx 35g	Approx 45g	Approx 50g
Sample Description	-	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected

Misc Inorg - Soil				
Our Reference:	UNITS	131837-3	131837-9	131837-14
Your Reference	-----	TP207	TP202	TP206
Depth	-----	0.1-0.2	0.1-0.2	0.7-0.8
Date Sampled		27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil
Date prepared	-	30/07/2015	30/07/2015	30/07/2015
Date analysed	-	30/07/2015	30/07/2015	30/07/2015
pH 1:5 soil:water	pH Units	6.4	7.7	5.0

CEC				
Our Reference:	UNITS	131837-3	131837-9	131837-14
Your Reference	-----	TP207	TP202	TP206
Depth	-----	0.1-0.2	0.1-0.2	0.7-0.8
Date Sampled		27/07/2015	27/07/2015	27/07/2015
Type of sample		Soil	Soil	Soil
Date extracted	-	31/07/2015	31/07/2015	31/07/2015
Date analysed	-	31/07/2015	31/07/2015	31/07/2015
Exchangeable Ca	meq/100g	3.5	5.1	1.3
Exchangeable K	meq/100g	0.1	<0.1	0.2
Exchangeable Mg	meq/100g	2.3	0.60	5.2
Exchangeable Na	meq/100g	0.24	<0.1	0.61
Cation Exchange Capacity	meq/100g	6.2	5.8	7.3

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 (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
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. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-005	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-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Inorg-008	Moisture content determined by heating at 105+/-5 deg C for a minimum of 12 hours.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Metals-009	Determination of exchangeable cations and cation exchange capacity in soil based on Rayment and Lyons 2011.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Soil						Base II Duplicate II %RPD		
Date extracted	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	29/07/2015
Date analysed	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	29/07/2015
TRHC ₆ - C ₉	mg/kg	25	Org-016	<25	131837-1	<25 <25	LCS-3	120%
TRHC ₆ - C ₁₀	mg/kg	25	Org-016	<25	131837-1	<25 <25	LCS-3	120%
Benzene	mg/kg	0.2	Org-016	<0.2	131837-1	<0.2 <0.2	LCS-3	121%
Toluene	mg/kg	0.5	Org-016	<0.5	131837-1	<0.5 <0.5	LCS-3	115%
Ethylbenzene	mg/kg	1	Org-016	<1	131837-1	<1 <1	LCS-3	120%
m+p-xylene	mg/kg	2	Org-016	<2	131837-1	<2 <2	LCS-3	121%
o-Xylene	mg/kg	1	Org-016	<1	131837-1	<1 <1	LCS-3	120%
naphthalene	mg/kg	1	Org-014	<1	131837-1	<1 <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	100	131837-1	91 97 RPD: 6	LCS-3	111%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH (C10-C40) in Soil						Base II Duplicate II %RPD		
Date extracted	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	29/07/2015
Date analysed	-			30/07/2015	131837-1	30/07/2015 30/07/2015	LCS-3	30/07/2015
TRHC ₁₀ - C ₁₄	mg/kg	50	Org-003	<50	131837-1	<50 <50	LCS-3	121%
TRHC ₁₅ - C ₂₈	mg/kg	100	Org-003	<100	131837-1	<100 <100	LCS-3	123%
TRHC ₂₉ - C ₃₆	mg/kg	100	Org-003	<100	131837-1	<100 <100	LCS-3	126%
TRH>C ₁₀ -C ₁₆	mg/kg	50	Org-003	<50	131837-1	<50 <50	LCS-3	121%
TRH>C ₁₆ -C ₃₄	mg/kg	100	Org-003	<100	131837-1	<100 <100	LCS-3	123%
TRH>C ₃₄ -C ₄₀	mg/kg	100	Org-003	<100	131837-1	<100 <100	LCS-3	126%
Surrogate o-Terphenyl	%		Org-003	106	131837-1	108 106 RPD: 2	LCS-3	116%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	29/07/2015
Date analysed	-			30/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	30/07/2015
Naphthalene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	LCS-3	113%
Acenaphthylene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	LCS-3	96%
Phenanthrene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	LCS-3	92%
Anthracene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 0.1	LCS-3	94%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Pyrene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	0.1 0.1 RPD: 0	LCS-3	97%
Benzo(a)anthracene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	LCS-3	96%
Benzo(b,j+k) fluoranthene	mg/kg	0.2	Org-012 subset	<0.2	131837-1	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	Org-012 subset	<0.05	131837-1	0.07 0.06 RPD: 15	LCS-3	102%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012 subset	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012 subset	119	131837-1	123 119 RPD: 3	LCS-3	128%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-3	29/07/2015
Date analysed	-			30/07/2015	131837-1	30/07/2015 30/07/2015	LCS-3	30/07/2015
HCB	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	81%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	91%
Heptachlor	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	89%
delta-BHC	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	97%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	96%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	96%
Dieldrin	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	102%
Endrin	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	98%
pp-DDD	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	102%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	LCS-3	87%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCMX	%		Org-005	116	131837-1	111 110 RPD: 1	LCS-3	130%

Client Reference: 72087.03, Bankstown

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			29/07/2015	131837-1	29/072015 29/072015	LCS-3	29/07/2015
Date analysed	-			30/07/2015	131837-1	30/07/2015 30/07/2015	LCS-3	30/07/2015
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	LCS-3	100%
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	131837-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		Org-006	116	131837-1	111 110 RPD: 1	LCS-3	103%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-5	29/07/2015
Date analysed	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-5	29/07/2015
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	131837-1	8 5 RPD: 46	LCS-5	107%
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	131837-1	0.4 0.4 RPD: 0	LCS-5	105%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	131837-1	11 11 RPD: 0	LCS-5	105%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	131837-1	32 33 RPD: 3	LCS-5	106%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	131837-1	78 85 RPD: 9	LCS-5	100%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	131837-1	<0.1 <0.1	LCS-5	88%
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	131837-1	9 9 RPD: 0	LCS-5	101%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	131837-1	200 190 RPD: 5	LCS-5	103%

Client Reference: 72087.03, Bankstown

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Misc Soil - Inorg						Base II Duplicate II %RPD		
Date prepared	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-1	29/07/2015
Date analysed	-			29/07/2015	131837-1	29/07/2015 29/07/2015	LCS-1	29/07/2015
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	131837-1	<5 <5	LCS-1	103%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Misc Inorg - Soil						Base II Duplicate II %RPD		
Date prepared	-			30/07/2015	[NT]	[NT]	LCS-1	30/07/2015
Date analysed	-			30/07/2015	[NT]	[NT]	LCS-1	30/07/2015
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	LCS-1	103%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
CEC						Base II Duplicate II %RPD		
Date extracted	-			31/07/2015	131837-3	31/07/2015 31/07/2015	LCS-1	31/07/2015
Date analysed	-			31/07/2015	131837-3	31/07/2015 31/07/2015	LCS-1	31/07/2015
Exchangeable Ca	meq/100 g	0.1	Metals-009	<0.1	131837-3	3.5 3.6 RPD: 3	LCS-1	111%
Exchangeable K	meq/100 g	0.1	Metals-009	<0.1	131837-3	0.1 0.2 RPD: 67	LCS-1	92%
Exchangeable Mg	meq/100 g	0.1	Metals-009	<0.1	131837-3	2.3 2.3 RPD: 0	LCS-1	108%
Exchangeable Na	meq/100 g	0.1	Metals-009	<0.1	131837-3	0.24 0.29 RPD: 19	LCS-1	102%
Cation Exchange Capacity	meq/100 g	1	Metals-009	<1.0	131837-3	6.2 6.4 RPD: 3	[NR]	[NR]
QUALITY CONTROL	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
vTRH(C6-C10)/BTEXN in Soil								
Date extracted	-	131837-11		29/07/2015 29/07/2015		131837-2	29/07/2015	
Date analysed	-	131837-11		30/07/2015 30/07/2015		131837-2	29/07/2015	
TRHC ₆ - C ₉	mg/kg	131837-11		<25 <25		131837-2	116%	
TRHC ₆ - C ₁₀	mg/kg	131837-11		<25 <25		131837-2	116%	
Benzene	mg/kg	131837-11		<0.2 <0.2		131837-2	116%	
Toluene	mg/kg	131837-11		<0.5 <0.5		131837-2	112%	
Ethylbenzene	mg/kg	131837-11		<1 <1		131837-2	116%	
m+p-xylene	mg/kg	131837-11		<2 <2		131837-2	117%	
o-Xylene	mg/kg	131837-11		<1 <1		131837-2	116%	
naphthalene	mg/kg	131837-11		<1 <1		[NR]	[NR]	
Surrogate aaa-Trifluorotoluene	%	131837-11		99 98 RPD: 1		131837-2	105%	

Client Reference: 72087.03, Bankstown

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	131837-11	29/07/2015 29/07/2015	131837-2	29/07/2015
Date analysed	-	131837-11	30/07/2015 30/07/2015	131837-2	30/07/2015
TRHC ₁₀ - C ₁₄	mg/kg	131837-11	<50 <50	131837-2	123%
TRHC ₁₅ - C ₂₈	mg/kg	131837-11	<100 <100	131837-2	116%
TRHC ₂₉ - C ₃₆	mg/kg	131837-11	<100 <100	131837-2	127%
TRH>C ₁₀ -C ₁₆	mg/kg	131837-11	<50 <50	131837-2	123%
TRH>C ₁₆ -C ₃₄	mg/kg	131837-11	<100 <100	131837-2	116%
TRH>C ₃₄ -C ₄₀	mg/kg	131837-11	<100 <100	131837-2	127%
Surrogate o-Terphenyl	%	131837-11	107 107 RPD: 0	131837-2	121%
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	131837-11	29/07/2015 29/07/2015	131837-2	29/07/2015
Date analysed	-	131837-11	30/07/2015 30/07/2015	131837-2	29/07/2015
Naphthalene	mg/kg	131837-11	<0.1 <0.1	131837-2	104%
Acenaphthylene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	131837-11	<0.1 <0.1	131837-2	88%
Phenanthrene	mg/kg	131837-11	<0.1 <0.1	131837-2	86%
Anthracene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	131837-11	0.1 0.2 RPD: 67	131837-2	87%
Pyrene	mg/kg	131837-11	0.1 0.2 RPD: 67	131837-2	90%
Benzo(a)anthracene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	131837-11	<0.1 <0.1	131837-2	92%
Benzo(b,j+k)fluoranthene	mg/kg	131837-11	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	131837-11	0.07 0.07 RPD: 0	131837-2	84%
Indeno(1,2,3-c,d)pyrene	mg/kg	131837-11	0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	131837-11	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	131837-11	114 114 RPD: 0	131837-2	126%

QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	131837-7	29/07/2015 29/07/2015	131837-2	29/07/2015
Date analysed	-	131837-7	30/07/2015 30/07/2015	131837-2	30/07/2015
HCB	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	131837-7	<0.1 <0.1	131837-2	79%
gamma-BHC	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	131837-7	<0.1 <0.1	131837-2	87%
Heptachlor	mg/kg	131837-7	<0.1 <0.1	131837-2	85%
delta-BHC	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	131837-7	<0.1 <0.1	131837-2	92%
Heptachlor Epoxide	mg/kg	131837-7	<0.1 <0.1	131837-2	92%
gamma-Chlordane	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	131837-7	<0.1 <0.1	131837-2	91%
Dieldrin	mg/kg	131837-7	0.7 0.7 RPD: 0	131837-2	98%
Endrin	mg/kg	131837-7	<0.1 <0.1	131837-2	93%
pp-DDD	mg/kg	131837-7	<0.1 <0.1	131837-2	97%
Endosulfan II	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	131837-7	<0.1 <0.1	131837-2	89%
Methoxychlor	mg/kg	131837-7	<0.1 <0.1	[NR]	[NR]
Surrogate TCMX	%	131837-7	110 95 RPD: 15	131837-2	120%

Client Reference: 72087.03, Bankstown

QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	131837-2	29/07/2015
Date analysed	-	[NT]	[NT]	131837-2	30/07/2015
Aroclor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	[NT]	[NT]	131837-2	101%
Aroclor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	131837-2	102%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	131837-11	29/07/2015 29/07/2015	131837-2	29/07/2015
Date analysed	-	131837-11	29/07/2015 29/07/2015	131837-2	29/07/2015
Arsenic	mg/kg	131837-11	10 10 RPD: 0	131837-2	94%
Cadmium	mg/kg	131837-11	<0.4 <0.4	131837-2	92%
Chromium	mg/kg	131837-11	13 13 RPD: 0	131837-2	100%
Copper	mg/kg	131837-11	12 17 RPD: 34	131837-2	110%
Lead	mg/kg	131837-11	41 44 RPD: 7	131837-2	86%
Mercury	mg/kg	131837-11	<0.1 <0.1	131837-2	88%
Nickel	mg/kg	131837-11	3 5 RPD: 50	131837-2	85%
Zinc	mg/kg	131837-11	39 44 RPD: 12	131837-2	#

Report Comments:

METALS_S: # Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 131837-11 for Ni. Therefore a triplicate result has been issued as laboratory sample number 131837-18.

Asbestos: A portion of the supplied sample was sub-sampled for asbestos analysis according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.

Note: Samples 131837-1 to 13 were sub-sampled from jars provided by the client.

Asbestos ID was analysed by Approved Identifier:	Paul Ching
Asbestos ID was authorised by Approved Signatory:	Paul Ching

INS: Insufficient sample for this test
NA: Test not required
<: Less than

PQL: Practical Quantitation Limit
RPD: Relative Percent Difference
>: Greater than

NT: Not tested
NA: Test not required
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 (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

CHAIN OF CUSTODY

Client: Douglas Partners		Project Number 72087.03												
Contact Person: Christopher Bagla		Project Name: PSI and Waste Classification, Bankstown												
Project Mgr: Dave Walker		PO No.:												
Address: 96 Hermitage Road West Ryde NSW 2114		Lab Quote No.: Standard												
Phone: 9809 0666		Date results required:												
Email: Chris.Bagla@douglaspartners.com.au		Or choose:												
Mob: 0417 527 060		Note: Inform lab in advance if urgent turnaround is required - surcharges apply												
@douglaspartners.com.au		Report format: esdat / PDF / Excel												
@douglaspartners.com.au		Comments: Samples already held by Envirolab												
Sample Information														
Lab Sample ID	Field Sample ID	Depth	Date sampled	Container Type	Type of sample	Combo 7a	Combo 3a	Combo 3	pH	CEC	Metals (B)	TRH and BTEX	Tests Required	Comments
1	TP201	0.1 - 0.2	27/7/15	G	S	X								
2	TP203	0.1 - 0.2	27/7/15	G	S	X								
3	TP207	0.1 - 0.2	27/7/15	G	S	X			X					
4	TP208	0.1 - 0.2	27/7/15	G	S	X								
5	TP209	0.1 - 0.2	27/7/15	G	S	X								
6	TP210	0.2 - 0.3	27/7/15	G	S	X								
7	TP211	0.3 - 0.4	27/7/15	G	S	X								
8	SP2		27/7/15	G	S	X								
9	TP202	0.1 - 0.2	27/7/15	G	S		X		X					
10	TP204	0.1 - 0.2	27/7/15	G	S		X							
11	TP205	0.05 - 0.1	27/7/15	G	S		X							
12	TP206	0.1 - 0.2	27/7/15	G	S		X							
13	SP1		27/7/15	G	S		X							
14	TP206	0.7 - 0.8	27/7/15	G	S			X	X					
15	TP212	0.3 - 0.4	27/7/15	G	S			X						
16	SP3		27/7/15	G	S			X						
17	BD4/270715		27/7/15	G	S						X	X		
	BD6/270715		27/7/15	G	S						X	X		
Relinquished by: Douglas Partners										Sample Receipt				
Hand delivered / <u>Company</u> (by whom)										Received by (Company): <u>ELS</u>				
Condition of Sample at dispatch (Color Ambient (circle))										Print Name: <u>JMH</u>				
Temperature (if Applicable):										Date & Time: <u>28/7/15 13:25</u>				
Print Name: <u>CHRISTOPHER BAGLA</u>										Signature: <u>[Signature]</u>				
Date & Time: <u>28/7/15 8:38 am</u>										Signature: <u>[Signature]</u>				
Signature: <u>[Signature]</u>										Signature: <u>[Signature]</u>				

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 131837

Date Received: 28/7/15
Time Received: 13:25
Received by: JMH
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

SAMPLE RECEIPT ADVICE

Client Details	
Client	Douglas Partners Pty Ltd
Attention	Christopher Bagia, Dave Walker

Sample Login Details	
Your Reference	72087.03, Bankstown
Envirolab Reference	131837
Date Sample Received	28/07/2015
Date Instructions Received	28/07/2015
Date Results Expected to be Reported	04/08/2015

Sample Condition	
Samples received in appropriate condition for analysis	YES
No. of Samples Provided	17 soils
Turnaround Time Requested	Standard
Temperature on receipt (°C)	3.1
Cooling Method	Ice
Sampling Date Provided	YES

Comments
Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolabservices.com.au	Email: jhurst@envirolabservices.com.au

Sample and Testing Details on following page

Sample Id	Acid Extractable metals in soil	Asbestos ID - soils	CEC	Organochlorine Pesticides in soil	PAHs in Soil	PCBs in Soil	pH 1:5 soil:water	svTRH (C10-C40) in Soil	Total Phenolics (as Phenol)	vTRH(C6-C10)/BTEXN in Soil
TP201-0.1-0.2	✓	✓		✓	✓	✓		✓	✓	✓
TP203-0.1-0.2	✓	✓		✓	✓	✓		✓	✓	✓
TP207-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TP208-0.1-0.2	✓	✓		✓	✓	✓		✓	✓	✓
TP209-0.1-0.2	✓	✓		✓	✓	✓		✓	✓	✓
TP210-0.2-0.3	✓	✓		✓	✓	✓		✓	✓	✓
TP211-0.3-0.4	✓	✓		✓	✓	✓		✓	✓	✓
SP2	✓	✓		✓	✓	✓		✓	✓	✓
TP202-0.1-0.2	✓	✓	✓		✓		✓	✓		✓
TP204-0.1-0.2	✓	✓			✓			✓		✓
TP205-0.05-0.1	✓	✓			✓			✓		✓
TP206-0.1-0.2	✓	✓			✓			✓		✓
SP1	✓	✓			✓			✓		✓
TP206-0.7-0.8	✓		✓		✓		✓	✓		✓
TP212-0.3-0.4	✓				✓			✓		✓
SP3	✓				✓			✓		✓
BD4/270715	✓							✓		✓

Douglas Partners (Syd)
96 Hermitage Road
West Ryde
NSW 2114



Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or
measurements included in this document are traceable
to Australian/national standards.

Attention: David Walker

Report 466827-S
Project name PSI AND WASTE CLASSIFICATION BANKSTOWN
Project ID 72087.03
Received Date Jul 29, 2015

Client Sample ID			BD6/270715
Sample Matrix			Soil
Eurofins mgt Sample No.			S15-JI25112
Date Sampled			Jul 27, 2015
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	130
TRH C29-C36	50	mg/kg	69
TRH C10-36 (Total)	50	mg/kg	200
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene ^{N02}	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
TRH >C10-C16	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	180
TRH >C34-C40	100	mg/kg	< 100
Heavy Metals			
Arsenic	2	mg/kg	11
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	15
Copper	5	mg/kg	170
Lead	5	mg/kg	180
Mercury	0.05	mg/kg	< 0.05
Nickel	5	mg/kg	12
Zinc	5	mg/kg	110
% Moisture	0.1	%	13

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jul 30, 2015	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jul 30, 2015	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jul 29, 2015	14 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jul 30, 2015	14 Day
Metals M8 - Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS	Sydney	Jul 29, 2015	28 Day
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Jul 29, 2015	14 Day

Company Name: Douglas Partners (Syd)
Address: 96 Hermitage Road
West Ryde
NSW 2114

Project Name: PSI AND WASTE CLASSIFICATION BANKSTOWN
Project ID: 72087.03

Order No.:
Report #: 466827
Phone: 02 9809 0666
Fax:

Received: Jul 29, 2015 3:05 PM
Due: Aug 5, 2015
Priority: 5 Day
Contact Name: David Walker

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Metals M8	BTEX	Moisture Set	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted								
Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydney Laboratory - NATA Site # 18217					X	X	X	X
Brisbane Laboratory - NATA Site # 20794								
External Laboratory								
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
BD6/270715	Jul 27, 2015		Soil	S15-JI25112	X	X	X	X

Eurofins | mgt Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH C6-C10 less BTEX (F1)	mg/kg	< 20			20	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.05			0.05	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	108			70-130	Pass	
TRH C10-C14	%	119			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	93			70-130	Pass	
Toluene	%	92			70-130	Pass	
Ethylbenzene	%	92			70-130	Pass	
m&p-Xylenes	%	96			70-130	Pass	
o-Xylene	%	97			70-130	Pass	
Xylenes - Total	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	102			70-130	Pass	
TRH C6-C10	%	99			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16				%	113			70-130	Pass	
LCS - % Recovery										
Heavy Metals										
Arsenic				%	103			70-130	Pass	
Cadmium				%	100			70-130	Pass	
Chromium				%	101			70-130	Pass	
Copper				%	97			70-130	Pass	
Lead				%	98			70-130	Pass	
Mercury				%	94			70-130	Pass	
Nickel				%	98			70-130	Pass	
Zinc				%	99			70-130	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1					
TRH C6-C9	S15-JI24776	NCP		%	109			70-130	Pass	
TRH C10-C14	S15-JI24473	NCP		%	113			70-130	Pass	
Spike - % Recovery										
BTEX					Result 1					
Benzene	S15-JI24776	NCP		%	92			70-130	Pass	
Toluene	S15-JI24776	NCP		%	91			70-130	Pass	
Ethylbenzene	S15-JI24776	NCP		%	91			70-130	Pass	
m&p-Xylenes	S15-JI24776	NCP		%	95			70-130	Pass	
o-Xylene	S15-JI24776	NCP		%	97			70-130	Pass	
Xylenes - Total	S15-JI24776	NCP		%	96			70-130	Pass	
Spike - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1					
Naphthalene	S15-JI24776	NCP		%	116			70-130	Pass	
TRH C6-C10	S15-JI24776	NCP		%	101			70-130	Pass	
Spike - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1					
TRH >C10-C16	S15-JI24473	NCP		%	113			70-130	Pass	
Spike - % Recovery										
Heavy Metals					Result 1					
Arsenic	S15-JI24781	NCP		%	87			70-130	Pass	
Cadmium	S15-JI24781	NCP		%	91			70-130	Pass	
Chromium	S15-JI24781	NCP		%	87			70-130	Pass	
Copper	S15-JI24781	NCP		%	79			70-130	Pass	
Lead	S15-JI25930	NCP		%	87			70-130	Pass	
Mercury	S15-JI24781	NCP		%	79			70-130	Pass	
Nickel	S15-JI24781	NCP		%	84			70-130	Pass	
Zinc	S15-JI24781	NCP		%	113			70-130	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1	Result 2	RPD			
TRH C6-C9	S15-JI25183	NCP		mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S15-JI24617	NCP		mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S15-JI24617	NCP		mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S15-JI24617	NCP		mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	S15-JI25183	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S15-JI25183	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S15-JI25183	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S15-JI25183	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S15-JI25183	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S15-JI25183	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S15-JI25183	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S15-JI25183	NCP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C6-C10 less BTEX (F1)	S15-JI25183	NCP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	S15-JI24617	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S15-JI24617	NCP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S15-JI24617	NCP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S15-JI24780	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	S15-JI24780	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S15-JI24780	NCP	mg/kg	6.4	8.1	23	30%	Pass
Copper	S15-JI24780	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Lead	S15-JI24780	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Mercury	S15-JI24780	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S15-JI24780	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S15-JI24780	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S15-Jn18950	NCP	%	21	21	1.0	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.

Authorised By

Charl Du Preez	Analytical Services Manager
Bob Symons	Senior Analyst-Inorganic (NSW)
Ivan Taylor	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)



Glenn Jackson

National Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY



Client: Douglas Partners		Project Number 72087.03		To: EnviroLab Services	
Contact Person: Christopher Bagla		Project Name: PSI and Waste Classification, Bankstown		Contact Person: Allen Hie	
Project Mgr: Dave Walker		PO No.:		Address: 12 Ashley Street	
Address: 96 Hermitage Road West Ryde NSW 2114		Lab Quote No.:		Chatswood NSW 2068	
Phone: 9809 0666 Mob: 0417 527 060		Date results required: Standard		Phone: 02 9910 6200	
Email: Chris.Bagla@douglaspartners.com.au Dave.Walker@douglaspartners.com.au		Or choose: Note: Inform lab in advance if urgent turnaround is required - surcharges apply		Fax: 02 9910 6201	
		Report format: excel / PDF / Excel		Email: ahie@envirolab.com.au	
		Comments: Samples already held by EnviroLab		Laboratory Report No:	
				Lab Comments:	

Sample Information						Tests Required										Comments	
Lab Sample ID	Field Sample ID	Depth	Date sampled	Container Type	Type of sample	Combo 7a	Combo 3a	Combo 3	pH	CEC	Metals (8)	TRH and BTEX					Provide as much information about the sample as you can
1	TP201	0.1 - 0.2	27/7/15	G	S	X											
2	TP203	0.1 - 0.2	27/7/15	G	S	X											
3	TP207	0.1 - 0.2	27/7/15	G	S	X			X	X							
4	TP208	0.1 - 0.2	27/7/15	G	S	X											
5	TP209	0.1 - 0.2	27/7/15	G	S	X											
6	TP210	0.2 - 0.3	27/7/15	G	S	X											
7	TP211	0.3 - 0.4	27/7/15	G	S	X											
8	SP2		27/7/15	G	S	X											
9	TP202	0.1 - 0.2	27/7/15	G	S		X		X	X							
10	TP204	0.1 - 0.2	27/7/15	G	S		X										
11	TP205	0.05 - 0.1	27/7/15	G	S		X										
12	TP206	0.1 - 0.2	27/7/15	G	S		X										
13	SP1		27/7/15	G	S		X										
14	TP206	0.7 - 0.8	27/7/15	G	S			X	X	X							
15	TP212	0.3 - 0.4	27/7/15	G	S			X									
16	SP3		27/7/15	G	S			X									
17	BD4/270715		27/7/15	G	S						X	X					
18	BD6/270715		27/7/15	G	S						X	X					* Send to EnviroLab for analysis

Relinquished by: Douglas Partners		Sample Receipt		Lab use only:	
Hand delivered ☒ (by whom)		Received by (Company): ELS		Samples Received: Cool or Ambient (circle one)	
Condition of Sample at dispatch: Cool or Ambient (circle)		Print Name: JYH		Temperature Received at: (if applicable)	
Temperature (if Applicable):		Date & Time: 28/7/15 12:25		Transported by: Hand delivered / courier	
Print Name: CHRISTOPHER BAGLA		Signature: [Signature]			
Date & Time: 28/7/15					
Signature: [Signature] 8:38am					



EnviroLab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 131837

Date Received: 28/7/15

Time Received: 13:25

Received by: JYH

Temp: Cool/Ambient 3.1

Cooling: Ice/icepack

Security: Intact/Broken/None

CERTIFICATE OF ANALYSIS

131837-A

Client:

Douglas Partners Pty Ltd
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Christopher Bagia, Dave Walker

Sample log in details:

Your Reference:	72087.03, Bankstown
No. of samples:	Additional testing on soils
Date samples received / completed instructions received	28/07/15 / 04/08/15

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:	11/08/15 / 7/08/15
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

Metals in TCLP USEPA 1311			
Our Reference:	UNITS	131837-A-5	131837-A-7
Your Reference	-----	TP209	TP211
Depth	-----	0.1-0.2	0.3-0.4
Date Sampled		27/07/2015	27/07/2015
Type of sample		Soil	Soil
Date extracted	-	06/08/2015	06/08/2015
Date analysed	-	06/08/2015	06/08/2015
pH of soil for fluid# determ.	pH units	9.0	9.8
pH of soil for fluid # determ. (acid)	pH units	1.5	1.6
Extraction fluid used	-	1	1
pH of final Leachate	pH units	5.0	5.3
Lead in TCLP	mg/L	0.07	0.62

PAHs in TCLP (USEPA 1311)			
Our Reference:	UNITS	131837-A-5	131837-A-7
Your Reference	-----	TP209	TP211
Depth	-----	0.1-0.2	0.3-0.4
Date Sampled		27/07/2015	27/07/2015
Type of sample		Soil	Soil
Date extracted	-	6/08/2015	6/08/2015
Date analysed	-	6/08/2015	6/08/2015
Naphthalene in TCLP	mg/L	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001
Benzo(b,j,k)fluoranthene in TCLP	mg/L	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	94	88

Method ID	Methodology Summary
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) based upon AS 4439 and USEPA 1311. Additional information as required in AS4439.3 section 11 can be provided on request.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Org-012 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
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-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			06/08/2015	[NT]	[NT]	LCS-W1	06/08/2015
Date analysed	-			06/08/2015	[NT]	[NT]	LCS-W1	06/08/2015
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	110%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			6/08/2015	[NT]	[NT]	LCS-W1	6/08/2015
Date analysed	-			6/08/2015	[NT]	[NT]	LCS-W1	6/08/2015
Naphthalene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	85%
Acenaphthylene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	71%
Phenanthrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	75%
Anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	73%
Pyrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	76%
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	75%
Benzo(b,j,k)fluoranthene in TCLP	mg/L	0.002	Org-012 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	73%
Indeno(1,2,3-c,d)pyrene -TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate <i>p</i> -Terphenyl-d14	%		Org-012	82	[NT]	[NT]	LCS-W1	81%

Client Reference: 72087.03, Bankstown

QUALITY CONTROL Metals in TCLP USEPA1311	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	131837-A-5	06/08/2015
Date analysed	-	[NT]	[NT]	131837-A-5	06/08/2015
Lead in TCLP	mg/L	[NT]	[NT]	131837-A-5	106%

Report Comments:

Asbestos ID was analysed by Approved Identifier: Not applicable for this job
Asbestos ID was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in 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 (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

CERTIFICATE OF ANALYSIS

131837-A

Client:

Douglas Partners Pty Ltd
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Christopher Bagia, Dave Walker

Sample log in details:

Your Reference:	72087.03, Bankstown
No. of samples:	Additional testing on soils
Date samples received / completed instructions received	28/07/15 / 04/08/15

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:	11/08/15 / 7/08/15
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

Metals in TCLP USEPA 1311			
Our Reference:	UNITS	131837-A-5	131837-A-7
Your Reference	-----	TP209	TP211
Depth	-----	0.1-0.2	0.3-0.4
Date Sampled		27/07/2015	27/07/2015
Type of sample		Soil	Soil
Date extracted	-	06/08/2015	06/08/2015
Date analysed	-	06/08/2015	06/08/2015
pH of soil for fluid# determ.	pH units	9.0	9.8
pH of soil for fluid # determ. (acid)	pH units	1.5	1.6
Extraction fluid used	-	1	1
pH of final Leachate	pH units	5.0	5.3
Lead in TCLP	mg/L	0.07	0.62

PAHs in TCLP (USEPA 1311)			
Our Reference:	UNITS	131837-A-5	131837-A-7
Your Reference	-----	TP209	TP211
Depth	-----	0.1-0.2	0.3-0.4
Date Sampled		27/07/2015	27/07/2015
Type of sample		Soil	Soil
Date extracted	-	6/08/2015	6/08/2015
Date analysed	-	6/08/2015	6/08/2015
Naphthalene in TCLP	mg/L	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001
Benzo(b,j,k)fluoranthene in TCLP	mg/L	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	94	88

Method ID	Methodology Summary
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) based upon AS 4439 and USEPA 1311. Additional information as required in AS4439.3 section 11 can be provided on request.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Org-012 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
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-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			06/08/2015	[NT]	[NT]	LCS-W1	06/08/2015
Date analysed	-			06/08/2015	[NT]	[NT]	LCS-W1	06/08/2015
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	110%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			6/08/2015	[NT]	[NT]	LCS-W1	6/08/2015
Date analysed	-			6/08/2015	[NT]	[NT]	LCS-W1	6/08/2015
Naphthalene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	85%
Acenaphthylene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	71%
Phenanthrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	75%
Anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	73%
Pyrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	76%
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	75%
Benzo(b,j,k)fluoranthene in TCLP	mg/L	0.002	Org-012 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	LCS-W1	73%
Indeno(1,2,3-c,d)pyrene -TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate <i>p</i> -Terphenyl-d14	%		Org-012	82	[NT]	[NT]	LCS-W1	81%

Client Reference: 72087.03, Bankstown

QUALITY CONTROL Metals in TCLP USEPA1311	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	131837-A-5	06/08/2015
Date analysed	-	[NT]	[NT]	131837-A-5	06/08/2015
Lead in TCLP	mg/L	[NT]	[NT]	131837-A-5	106%

Report Comments:

Asbestos ID was analysed by Approved Identifier: Not applicable for this job
Asbestos ID was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in 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 (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Appendix J

QA/QC Procedures and Results

QA/QC PROCEDURES AND RESULTS

Q1. Data Quality Objectives

The PSI has been devised broadly in accordance with the seven step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of the National Environment Protection (Assessment of Site Contamination) Measure 1999 as amended 2013 (NEPC 2013). The DQO process is outlined as follows:

- Stating the Problem;
- Identifying the Decision;
- Identifying Inputs to the Decision;
- Defining the Boundary of the Assessment;
- Developing a Decision Rule;
- Specifying Acceptable Limits on Decision Errors; and
- Optimising the Design for Obtaining Data.

The DQOs have been addressed within the report as shown in Table Q1.

Table Q1: Data Quality Objectives

Data Quality Objective	Report Section Where Addressed
State the Problem	S1 Introduction
Identify the Decision	S10 Discussion S11 Conclusion
Identify Inputs to the Decision	S1 Introduction S3 Site Identification and Description S4 Topography, Geology, and Hydrogeology S5 Site history S6 Potential Contamination Sources and Preliminary Conceptual Site Model S8 Site Assessment Criteria S9 Field and Analytical Results
Define the Boundary of the Assessment	S3 Site Identification
Develop a Decision Rule	S8 Site Assessment Criteria
Specify Acceptable Limits on Decision Errors	S7 Fieldwork, Analysis and QA/QC
Optimise the Design for Obtaining Data	S2 Scope of Works S7 Fieldwork, Analysis and QA/QC

Q2. FIELD QUALITY ASSURANCE AND QUALITY CONTROL

The field QC procedures for sampling as prescribed in Douglas Partners' *Field Procedures Manual* were followed at all times during the assessment.

Q2.1 Sampling Team

Field sampling was undertaken by DP Environmental Scientist, Chris Bagia. Site works were undertaken on 27 July 2015. Sampling was typically undertaken during sunny and cool weather conditions. The field environmental scientist was instructed by the Project Manager regarding the sampling processes to be adopted.

Q2.2 Soil Sample Collection

Soil samples were collected excavator bucket returns using disposal nitrile gloves (to avoid the need for decontamination). Further details of the sampling methodology is presented in Section 7 of the report.

Q2.3 Logs

Logs for each soil sampling location were recorded in the field. The individual samples were recorded on the field logs along with the sample identity, location, depth, initials of sampler, replicate locations, replicate type, site observations..

Q2.4 Chain of Custody

Chain of custody information was recorded on the Chain-of-Custody (COC) sheets and accompanied samples to the analytical laboratory.

Q2.5 Sample Splitting Techniques

Replicate samples were collected in the field as a measure of accuracy, precision and repeatability of the results. Replicate samples were collected at a (minimum) rate of 1 replicate sample per 10 primary samples.

Field replicate samples for soil were collected from the same location and an identical depth to the primary sample. Equal portions of the primary sample were placed into the sampling jars and sealed. The sample was split to prevent the loss of volatiles from the soil but not homogenised in a bowl. Replicate samples were labelled with a DP identification number, recorded on DP's bore logs, so as to conceal their relationship to their primary sample from the analytical laboratory.

Q2.6 Replicate Analysis

A measure of the consistency of results for field samples is derived by the calculation of relative percentage differences (RPDs) for replicate samples. A RPD of 30% is generally considered typically

acceptable for inorganic analytes by NSW EPA, although in general a wider RPD range (50%) may be acceptable for organic analytes. RPDs have only been considered where a concentration is greater than five times the PQL.

Replicate samples were analysed at a rate of 10% of primary samples analysed (5% inter- and 5% intra-laboratory replicates).

Q2.6.1 Inter-Laboratory Analysis

Intra-laboratory replicates were analysed as an internal check of the reproducibility within the primary laboratory (Envirolab Services Pty Ltd) and as a measure of consistency of sampling techniques.

A total of 16 primary soil samples were analysed to one intra-laboratory soil sample (6%). Therefore the 5% intra-laboratory replicate sampling requirement was met.

The comparative results of analysis between original and replicate samples are summarised in Table Q2

Table Q2: Intra-laboratory Results

Analyte	Primary Sample Concentration (mg/kg) TP207, 0.1-0.2m	Replicate Sample Concentration (mg/kg) BD4/270715	Difference (mg/kg)	RPD (%)
Arsenic	8	20	12	86
Cadmium	<0.4	<0.4	0	0
Chromium	11	25	14	78
Copper	62	12	50	135
Lead	93	22	71	123
Mercury	<0.1	<0.1	0	0
Nickel	10	6	4	50
Zinc	49	52	3	6
TRH C ₆ -C ₁₀	<25	<25	0	0
TRH >C ₁₀ -C ₁₆	<50	<50	0	0
TRH >C ₁₆ -C ₃₄	<100	<100	0	0
TRH >C ₃₄ -C ₄₀	<100	<100	0	0
Benzene	<0.2	<0.2	0	0
Toluene	<0.5	<0.5	0	0
Ethylbenzene	<1	<1	0	0
Xylenes	<3	<3	0	0
Naphthalene	<1	<1	0	0

The calculated RPD values were within the range of 30% for inorganic analytes and 50% for organics with the exception of those in bold. However, this is not considered to be significant because:

- The typically low actual differences in the concentrations of the replicate pairs where some RPD exceedances occurred;
- The replicate pair was collected from fill soils which by its nature is heterogeneous; and
- Replicates, rather than homogenised replicates were used to avoid volatile loss, hence greater variability can be expected.

Q2.6.2 Intra-Laboratory Analysis

Inter-laboratory replicates were conducted as a check of the reproducibility of results between the primary laboratory (EnviroLab Services Pty Ltd) and the secondary laboratory (Eurofins mgt) and as a measure of consistency of sampling techniques.

A total of 16 primary soil samples were analysed to one inter-laboratory soil samples (6%). Therefore the 5% inter-laboratory replicate sampling requirement was met.

The comparative results of analysis between original and inter-laboratory replicate samples are summarised in Table Q3.

Table Q3: Inter-laboratory Results

Analyte	Primary Sample Concentration (mg/kg) TP207, 0.1-0.2m	Replicate Sample Concentration (mg/kg) BD4/270715	Difference (mg/kg)	RPD (%)
Arsenic	9	11	2	20
Cadmium	<0.4	<0.4	0	0
Chromium	14	15	1	7
Copper	160	170	10	6
Lead	180	180	0	0
Mercury	<0.1	<0.05	0	0
Nickel	9	12	3	29
Zinc	90	110	20	20
TRH C ₆ -C ₁₀	<25	<20	0	0
TRH >C ₁₀ -C ₁₆	<50	<50	0	0
TRH >C ₁₆ -C ₃₄	210	180	30	15
TRH >C ₃₄ -C ₄₀	<100	<100	0	0
Benzene	<0.2	<0.1	0	0
Toluene	<0.5	<0.1	0	0
Ethylbenzene	<1	<0.1	0	0
Xylenes	<3	<0.3	0	0
Naphthalene	<1	<0.5	0	0

The calculated RPD values were within the acceptable range of 30% for inorganic analytes and 50% for organics.

Q2.7 Field Instrument Calibration

The photoionisation detector (PID) fitted with a was calibrated and serviced at Thermo Fisher Scientific on 24 March 2015 and with isobutylene gas prior to use.

Q3. LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Q3.1 Holding Times

A review of the laboratory certificates of analysis and chain-of-custody documentation indicated that holding times were met, as summarised in Table Q4.

Table Q4: Holding Times for Soil

Analyte	Recommended maximum holding time	Holding time met
Heavy Metals: As, Cd, Cr, Cu, Pb, Hg, Ni, Zn	6 months	Yes
TRH C ₆ -C ₉	14 days	Yes
TRH C ₁₀ -C ₃₆	14 days	Yes
BTEX	14 days	Yes
PAH	14 days	Yes
OCP	14 days	Yes
PCB	14 days	Yes
Phenols	14 days	Yes
pH	7 days	Yes
Asbestos	Nil	Yes

Q3.2 Analytical Laboratories

Samples were submitted to the following laboratories for analysis:

- Primary Laboratory: Envirolab Services Pty Ltd; and
- Secondary Laboratory: eurofins mgt.

The laboratories are all NATA accredited for the analysis undertaken.

Q3.3 Results of Laboratory QA/QC Procedures

The following QA/QC procedures were conducted by the laboratories. The results are included in the laboratory certificates of analysis.

Q3.3.1 Surrogate Spike

This sample is prepared by adding a known amount of surrogate, which behaves similarly to the analyte, prior to analysis to each sample. The recovery result indicates the proportion of the known concentration of the surrogate that is detected during analysis. These results are within acceptance limits as specified by the laboratories, indicating that the extraction technique was effective.

Q3.3.2 Practical Quantitation Limits - PQLs

The PQL is the lowest quantity of an analyte which can be measured with a high degree of confidence that the analyte is present at or above that concentration. PQLs at different analytical laboratories can differ based on the analytical techniques.

Q3.3.3 Reference and Daily Check Sample Results – Laboratory Control Sample (LCS)

This sample comprises spiking either a standard reference material or a control matrix (such as a blank of sand or water) with a known concentration of specific analytes. The LCS is then analysed and results compared against each other to determine how the laboratory has performed with regard to sample preparation and analytical procedure. LCSs are analysed at a frequency of 1 in 20, with a minimum of one analysed per batch. The laboratory QC for LCS was within the acceptance standards.

Q3.3.4 Laboratory Replicate Results

These are additional portions of a sample which are analysed in exactly the same manner as all other samples.

It is noted in laboratory certificate 131837 that the RPD was acceptance criteria was exceeded for 131837-11 for nickel. Therefore a triplicate result was issued as sample number 131837-18.

Overall, the laboratory RPD results were considered to be within the acceptable laboratory criteria.

Q3.3.5 Laboratory Blank Results

The laboratory blank, sometimes referred to as the method blank or reagent blank is the sample prepared and analysed at the beginning of every analytical run, following calibration of the analytical apparatus. This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, it can be determined by processing solvents and reagents in exactly the same manner as for samples. Laboratory blanks are analysed at a frequency of 1 in 20, with a minimum of one per batch. The laboratory QC for method blanks was within the acceptance standards.

Q3.3.6 Matrix Spike

This is a sample replicate prepared by adding a known amount of analyte prior to analysis, and then treated exactly the same as all other samples. The recovery result indicates the proportion of the known concentration of the analyte that is detected during analysis.

It was noted in laboratory certificate 131837 that percent recovery is not possible to report due to the inhomogenous nature of zinc in sample 131837-2. However, an acceptable recovery was obtained for the LCS. Overall, the laboratory QC results for matrix spikes was considered acceptable.

Q4. QA/QC DATA EVALUATION

Field and laboratory procedures were assessed against the following data quality indicators (DQIs):

- Completeness – a measure of the amount of usable data from a data collection activity;
- Comparability – the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness – the confidence (qualitative) of data representativeness of media present on-site;
- Precision – a measure of variability or reproducibility of data; and
- Accuracy – a measure of closeness of the data to the ‘true’ value.

The DQIs were assessed as outlined in the following table.

DQI	Considerations as specified in NEPM Schedule B2	Comment
Completeness		
Field Considerations	All critical locations sampled	All critical locations sampled in accordance with the proposal. All identified areas of environmental concern sampled.
	All samples collected (from grid and at depth)	Grid based soil sampling has been used to provide coverage of the site in accordance with the NSW EPA guidelines and proposal.
	Standard operating practices (SOPs) appropriate and complied with	Field staff followed SOPs as defined in the DP <i>Field Procedures Manual</i> .
	Experienced sampler	DP environmental scientist with 1 year of experience undertook sampling with guidance from a DP environmental engineer with 8 years experience
	Documentation correct	Field staff followed SOPs as defined in the DP <i>Field Procedures Manual</i> . Documentation reviewed and signed off by project reviewer

DQI	Considerations as specified in NEPM Schedule B2	Comment
Laboratory Considerations	All critical samples analysed according to the proposal.	The proposal was followed. Any variation to the proposal has been recorded in the report.
	All analytes analysed according to proposal	All analytes analysed according to the proposal. Any variation has been recorded in the report.
	Appropriate methods and PQLs/LOR	NATA approved methods have been adopted. Limits of reporting (LORs) and practical quantitation limits (PQLs) in accordance with the method have been used by the contract laboratory.
	Sample Documentation complete	Chain-of-custody (CoC) maintained and appended to the Certificates of Analysis(s). All Certificates of Analysis are complete and appended to the report.
	Sample holding times complied with	Sample holding times complied with the NATA accredited Laboratory.
Comparability		
Field Considerations	Same SOPs used on each occasion	Field staff followed SOPs for each day of sampling as defined in the <i>DP Field Procedures Manual</i>
	Experienced sampler	DP environmental scientist with 1 year of experience undertook sampling with guidance from a DP environmental engineer with 8 years experience
	Climatic conditions	Field staff recorded the climatic conditions at the time of sampling. Reported in Section Q2.1
	Same types of samples collected	Field staff followed SOPs as defined in the <i>DP Field Procedures Manual</i> and

DQI	Considerations as specified in NEPM Schedule B2	Comment
		sampling regime defined in the proposal.
Laboratory Considerations	Sample analytical methods used	Laboratories used are accredited by NATA for the analyses undertaken. Laboratory methods are as stated on the Certificates of Analysis
	Sample PQLs / LORs	PQL or LOR set by the laboratories are below the adopted site criteria or indicate across-the-board lack of detection.
	Same laboratories	EnviroLab Services Pty Ltd was used for primary sample analysis. Eurofins mgt was used for inter-laboratory duplicate sample analysis.
	Same units	All laboratory results are expressed in consistent units for each media type.
Representativeness		
Field Considerations	Appropriate media sampled according to proposal	Appropriate media were sampled in accordance with the proposal
	All media identified in proposal sampled	All media identified in proposal were sampled.
Laboratory Considerations	All samples analysed according to SAQP	All samples analysed according to proposal
Precision		
Field Considerations	SOPs appropriate and complied with	Field staff followed SOPs as defined in the <i>DP Field procedures Manual</i>
Laboratory Considerations	Analysis of: 1) laboratory and inter-laboratory duplicates	Laboratory acceptance limits are: 1) Average relative percentage difference (RPD) result <10 times PQL/LOR, no limit; results >10 times PQL/LOR, 0% -

DQI	Considerations as specified in NEPM Schedule B2	Comment
	2) field duplicates 3) laboratory-prepared volatile trip spikes	50% 2) Average relative percentage difference (RPD) result <10 times PQL/LOR, no limit; results >10 times PQL/LOR, 0% -50% 3) Recovery of 70-130%]
Accuracy (bias)		
Field Considerations	SOPs Appropriate and complied with	Field staff to follow SOPs as defined in the DP <i>Field Procedures Manual</i>
Laboratory Considerations	Analysis of: 1)field blanks 2)rinsate blank 3)reagent blank/method blank 4)matrix spike 5)surrogate spike	Laboratory acceptance limits are 1) Concentrations of analytes are <PQL/LOR 2) Concentrations of analytes are <PQL/LOR 3) Results are within acceptance limits as specified by the laboratory (recovery usually within 60-140%). 4) Results are generally within acceptance limits as specified by the laboratory (recovery within 70-130% for inorganics and 60-140% for organics). Results outside the acceptance limits is reported in Q.3.3.6 5) Results are within acceptance limits as specified by the laboratory (recovery within 70-130% for inorganics and 60-

DQI	Considerations as specified in NEPM Schedule B2	Comment
	6)reference material 7)laboratory control sample 8)laboratory-prepared spikes	140% for organics). 6) Analysis within the acceptable limits of the Certificate of Analysis for the reference material. These results are generally not contained in the Certificate of Analysis. 7) Results are within acceptance limits as specified by the laboratory (recovery within 70-130% for inorganics and 60-140% for organics). 8) Results are within acceptance limits as specified by the laboratory (recovery within 60-140%.*