GEO_LOGIX

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

Woolworths Ltd – January 2015

ENVIRONMENTAL :: GEOTECHNICAL :: PROJECT MANAGEMENT :: DUE DILIGENCE

DOCUMENT CONTROL

PHASE I ENVIRONMENTAL
SITE ASSESSMENT REPORT

Lot 4 DP 1196266, Bridgman Road
Hunterview, NSW

PREPARED FOR

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EXECUTIVE SUMMARY

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Woolworths Ltd (Woolworths) to conduct a Phase 1 Environmental Site Assessment (ESA) with limited soil sampling of the property located at Lot 4 DP 1196266, Bridgman Road, Hunterview NSW. The objective of the Phase I ESA was to conduct a site inspection, limited surface soil sampling and collation of site historical information to establish whether activities have occurred on site which may have resulted in contamination of the land. The findings of the report are based on a site inspection/preliminary sampling conducted on the 7th January 2014 and review of historical site data. Woolworths were not able to provide Geo-logix with the required land owner's consent to search of the WorkCover Stored Chemical Information Database and thus this search was not completed.

The subject site is located on the outskirts of a residential area in the north of Singleton, NSW. The site encompasses an area of approximately 21,570 m^2 on the corner of Glass Parade and Bridgman Road. At the time of the site inspection the site was unoccupied. Site topography and observations suggest large volumes of fill have been applied to the site. Based on observations during the site inspection fill appears to be earth fill with the occasional anthropogenic material including asphalt, concrete, brick and tile fragments and metal pieces.

Site historical records indicate:

- Prior to the 1980's, the eastern and northern portion of the site was owned farmers with residential/shed structures existing on the land. Aerial photos suggest some of these structures were demolished during this time. The western portion of the site was crown land and the main road and adjoining road running through it;
- By the 1990's, any remaining structures had been demolished. Anecdotal information from the Council suggests asbestos was removed from an old residential structure on the property by a licenced asbestos remover. The main road through the western portion of the site had been realigned along the western boundary of the site, in the current location of Bridgman Road;
- During the 1990's and 2000's, Council appear to have used the western portion of the site as a gravel depot. Aerial photos from 1990 show this area surfaced with gravel to form access roads.
- Site observations and comparisons with Google Street View suggest portions of the site have been filled during the period 2010 to 2013. Conflicting anecdotal information in regards to earth works on the site have been obtained by Geo-Logix. The extent and volume of filling and origin of the fill material cannot be confirmed.

A limited soil investigation was conducted across the site as a preliminary assessment of site contamination. The investigation comprised sampling and analysis of eight surface soil samples for commonly encountered contaminants of potential concern (COPC) comprising petroleum hydrocarbons (TRH, BTEX), polycyclic aromatic hydrocarbons (PAHs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs) and heavy metals. Soil sample locations were chosen for broad site coverage. COPC were not detected at concentrations above Tier 1 Assessment Criteria in all soil samples analysed.

The results of the Phase I ESA indicate that the site and surrounding areas has a mixed history of rural/residential landuse and as a Council Depot for fill storage. Other filling activities have been identified. Potentially contaminating landuse activities that have been identified to have occurred onsite include:

- Possible application of fill of unknown origin on the site; and
- Demolition of former site structures constructed from hazardous building materials; and
- Possible petroleum and pesticide storage associated with agricultural activities.

Based on the above identified site history there is potential for contamination of the land. Additional investigation is recommended to assess the presence/absence of such contamination.

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1. INTRODUCTION

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Woolworths Ltd (Woolworths) to conduct a Phase 1 Environmental Site Assessment (ESA) with limited soil sampling of the property located at Lot 4 DP 1196266, Bridgman Road, Hunterview NSW (Figure 1).

The objective of the Phase I ESA was to conduct a site inspection, limited surface soil sampling and collation of site historical information to establish whether activities have occurred on site which may have resulted in contamination of the land. The findings of the report are based on a site inspection conducted on the 7th January 2014 and review of historical site data. Woolworths were not able to provide Geo-logix with the required land owner's consent to search of the WorkCover Stored Chemical Information Database and thus this search was not completed.

2. SITE INFORMATION

2.1 Site Identification

The site comprises the following property (Figure 2):

Street Address	Lot and Deposited Plan (DP)	Approximate Area (m^2)
Bridgman Road, Hunterview NSW 2330	Lot 4 DP 1196266	21570

Property information sourced from Title Deed information and Singleton Shire Council.

2.2 Site Zoning and Land Use

The site is zoned B1 Neighbourhood Centre under the Singleton Local Environmental Plan 2013. Planning and Development Certificates are provided in Attachment A.

2.3 Site Description

The subject site is located on the outskirts of a residential area in the north of Singleton, NSW. The site encompasses an area of approximately 21,570 m^2 on the corner of Glass Parade and Bridgman Road. The lot is roughly triangular shaped squared off at the northern corner. At the time of the site inspection the site was unoccupied.

Site topography and observations suggest large volumes of fill have been applied to the site. Fill appears to be mounded approximately 1 to 2m higher than surrounding ground surface along the southern corner, western and northern boundaries of the site (Figure 2, Plates 1 – 3, 6). The majority of the site is largely flat with a slight slope to the east – southeast (Plates 4 and 5). The eastern portion of the site slopes steeply down towards the adjacent creek (Plates 7 and 8). Portions of these areas appear to have had fill applied, however the extent is unable to be determined based on visual observations.

A review of Google Street View imagery from February 2010 viewed from the western boundary appears to a gully previously existed through the northern portion of the site. The former gully area has been filled and was level at the time of the site inspection.

Based on observations during the site inspection the fill appears to be earth fill with the occasional anthropogenic material including asphalt, concrete, brick and tile fragments and metal pieces (Plates 9 and 10). The anthropogenic material was broadly spread across the site. A photographic log is presented in Attachment B.

2.4 Surrounding Land Use

Based on observations from the site inspection the surrounding landuse comprised the following:

- **East** – A creek, with vacant land beyond.
- **West** – Bridgman Road, with residential properties; and
- **South** – Glass Parade, with vacant land and an electrical substation beyond. Residential properties are located to the southeast;
- **North** – A residential property, with vacant land beyond.

2.5 Topography

Fill appears to have been applied to parts of the site as described in Section 2.3. The majority of the site is largely flat with a slight slope to the east – southeast. The eastern portion of the site slopes steeply down towards the adjacent creek. Review of Google Earth indicates the site is located at elevations from approximately 64 m Australian Height Datum (AHD) in the northwest corner to 56 mAHD in the eastern and southern corners.

2.6 Surface Water

The nearest surface water is a small creek that runs from north to south along the eastern boundary, approximately 5m from the site at the closest point.

2.7 Geology

Review of the 1:250,000 Singleton Geological Map (Rasmus, P. L., 1969) described geology underlying the site as Permian age Mulbring siltstone (siltstone and sandstone) of the Maitland Group.

2.8 Hydrogeology

It is expected that groundwater would follow the natural topography and generally flow south-east.

Reference to the NSW Office of Water groundwater mapping system (NSW Office of Water, 2015) indicates there are no registered groundwater bores within a 500 m radius of the site. The groundwater bore map is presented in Attachment C.

2.9 Underground Utilities

A Dial Before You Dig search was conducted to determine the presence of underground utilities which may act as conduits for contamination migration both onsite and offsite (Attachment D). The plans indicate:

- Electrical and Council utilities run beneath Glass Parade along the southeast boundary of the site;
- Telstra utilities run beneath the site from the northern portion to southern portion, extending south, and adjacent to the northern boundary extending east; and
- Telstra utilities also run beneath Bridgman Road along the western boundary of the site.

3. SITE HISTORY

The following information has been reviewed to determine historical land use and assess the likelihood of potentially contaminating activities having occurred at the site:

- Current and historical title deeds;
- Historical aerial photographs;
- Singleton Shire Council Section 149 Planning Certificate;
- Singleton Shire Council historical records;
- NSW Environment Protection Authority (EPA) contaminated land database and public register for regulated contaminated sites;
- Protection of Environment Operations Act 1997 Public Register;
- List of NSW Contaminated Sites Notified to EPA as at 23rd December 2014; and
- Department of Defence Unexploded Ordinance (UXO) Register.

NSW Workcover Dangerous Goods Licence records were not reviewed. The land owner's consent is required to review such records and was not provided to Geo-Logix by Woolworths.

3.1 Title Search

A title deeds search was conducted through the Land Titles Office. A detailed summary and title documents are presented in Attachment E.

Period	Eastern and Northern Portion	Western Portion
Prior to 1980s	Owned by various private individuals (farmers).	Crown land.
1980s – current	Purchased by Singleton Shire Council in 1981.	Owned by private individuals (farmers) from 1980 – 1995. Purchased by Singleton Council in 1995.

3.2 Aerial Photograph Review

Geo-Logix undertook a review of historical aerial photographs on record at the New South Wales Land and Property Information. Photos were examined for the years 1951, 1963, 1974, 1984, 1990 and 2000. Google Earth images were examined for the years 2008, 2010 and 2013. Photos are presented in Attachment F.

Aerial 1951

Area	Description
Site	Two structures (likely rural residential) appear to exist in the eastern portion of the site. A road runs from adjacent to northeast corner, through the western portion of the site. A track extends from the road, running diagonally from the northwest corner to the southwest corner via the centre of the site. Some clearing or disturbance of the earth appears to have occurred on the northern and southern portions of the site.
Surroundings	The site is located in a rural area in the northern area of Singleton, NSW. The site is surrounded by vacant grassed land likely used for grazing. The creek running north to south along the eastern boundary of the site is evident. A large dam and two smaller dams are evident west of the site. Residential/rural structures exist northwest of the site, beyond the main road.

Aerial 1963

Area	Description
Site	One of the structures previously observed on the eastern portion of the site has been demolished. The remaining structure appears to be a residential house. There appears to be a few smaller shed structures adjacent to the house. The remainder of the site appears similar to the previous aerial photograph.
Surroundings	Additional rural structures appear to have been constructed northwest of the site. The surrounding landuse appears similar to the previous aerial photograph.

Aerial 1974

Area	Description
Site	The site appears similar to the previous aerial photograph.
Surroundings	The surrounding landuse appears similar to the previous aerial photograph. An additional residential structure has been constructed northwest of the site, beyond the main road.

Aerial 1984

Area	Description
Site	The site appears similar to the previous aerial photograph.
Surroundings	The main road through the western portion of the site has been realigned and is now in the current location of Bridgman Road, adjacent to the western boundary of the site. A residential structure has been constructed adjacent to the northern boundary of the site. Some of the rural residential structures northwest of the site have been demolished. The remainder of the surrounding landuse appears similar to the previous aerial photograph.

Aerial 1990

Area	Description
Site	All residential/shed structures have been demolished. The remainder of the surrounding areas appear to be similar to the previous aerial photograph.
Surroundings	Some residential structures have been constructed west and northwest of the site. The surrounding areas appear similar to the previous aerial photograph.

Aerial 2000

Area	Description
Site	Parts of the western portion of the site appear to be surfaced with gravel. Small mounds of fill can be seen in the central and southern portions of the site. The site and surrounding areas appear similar to the previous aerial photograph.
Surroundings	Another residential structure has been constructed west of the site, beyond Bridgman Road. The remainder of the surrounding areas appear similar to the previous aerial photograph.

Google Earth 2008

Area	Description
Site	The site appears similar to the previous aerial photograph.
Surroundings	The electrical substation south of the site has been constructed. The remainder of the surrounding areas appear similar to the previous aerial photograph.

Google Earth 2010

Area	Description
Site	The site and surrounding areas appear similar to the previous aerial photograph.
Surroundings	

Google Earth 2013

Area	Description
Site	The site has been cleared and potentially some areas in the northern and southern portions of the site have been filled, however this difficult to tell from the photograph. Glass Parade has been developed adjacent to the southern boundary of the site. Some residential development has occurred southeast of the site.
Surroundings	

3.3 Singleton Shire Council Records

Council Records

A search of Singleton Shire Council records identified information pertaining:

- Previous earth works; and
- Removal of asbestos from the previous residential house.

At the time of reporting, Council was in the process of locating these records. Further anecdotal information obtained during conversations with Council is provided in Section 3.9.

Section 149 Planning Certificates

Review of Planning Certificates under Section 149 of the Environmental Planning and Assessment Act (1979) indicates the following for the subject property:

- The land has not been identified to include or comprise critical habitat;
- The land has not been identified as being in a heritage conservation area;
- The land has not been identified as containing an item of environmental heritage;

- The land has not been proclaimed as within a Mine Subsidence District;
- The land has not been identified as bush fire prone land;
- Council has not adopted a policy to restrict the development of the land because of the likelihood of landslip, tidal inundation or acid sulphate soils;
- Development of the land is not identified as being subject to flood related development controls; and
- Council has not been notified of any notices in relation to contamination for the subject site.

3.4 NSW WorkCover Dangerous Goods Licences

A search of the WorkCover Stored Chemical Information Database to identify any dangerous goods storage licences held for the subject site was not able to be undertaken due to the absence of the land owner's consent.

3.5 NSW OEH Contaminated Land Database

A review of the NSW OEH Contaminated Land Database established under Section 58 of the Contaminated Land Management Act 1997 found no records for the subject site. The search record is presented in Attachment G.

3.6 Protection of Environment Operations Act 1997 Public Register

A search of the public register established under Section 308 of the Protection of the Environment Operations Act 1997 (POEO Act) did not identify any records relating to Environmental Protection Licences, Licence Applications or Pollution Notices for the subject site. The search record is presented in Attachment H.

3.7 NSW Contaminated Sites Notified to NSW OEH

A search of the List of NSW Contaminated Sites Notified to NSW OEH as at 23rd December 2014 found no records for the subject site. The search record is presented in Attachment I.

3.8 Department of Defence UXO Register

A search of the Commonwealth of Australia Department of Defence Unexploded Ordinance (UXO) Register indicates the site is classified as outside areas of known UXO potential. The search results are presented in Attachment J.

3.9 Anecdotal Information

A conversation with Council employee Ms Kirsty Rae in the records department indicated there was information held on asbestos removal from the former residential dwelling on the site and records on earth works conducted on the site. It was indicated that parts of the site were filled from the adjacent residential land development east of the site. Ms Rae also indicated the Council engineer who oversaw the subdivision and development of the area is no longer employed by the Council. Ms Rae indicated there was information held on the asbestos being removed from the old house by a licensed asbestos remover.

A conversation with Mr Brad Weeks, Director of Bridgman Ridge Holdings Pty Ltd (Developer) indicated that the site was previously used as a small gravel depot by the Council prior to the recent development of the adjacent Glass Parade and earth works on the site. Mr Weeks informed Geo-Logix that no fill has been imported on the site and that cut and fill activities to fill in a gully in the northern portion has taken pace. Soil material was also cut from the top one metre of the site for use as fill on the adjacent Glass Parade.

4. SITE HISTORY SUMMARY

Period	Eastern and Northern Portion	Western Portion
Prior 1980s	This area was owned by various farmers and appears to have been rural residential. Aerial photos indicate a large shed or house was removed from the eastern portion of the site around the 1950's and 60's.	This area was crown land. The land was vacant with the main road and adjoining road to the house running through it.
1980s to1990s	Singleton Shire Council purchased the land in 1981. One remaining residential structure and various surrounding small sheds appear to have been removed around the late 1980's.	This area was owned by private individuals (farmers). The main road (Bridgman Road) was realigned from through this area to the current position along the western boundary of the site. The land appears to have remained vacant.
1990 to current	The eastern and northern portions of the site appear to remain grassed and vacant.	Singleton Shire Council purchased this land in 1995. Anecdotal information and aerial photos appear to indicate the Council used this portion as a gravel depot during this time. The majority of this area appears to be surfaced with gravel in the 2000, 2008 and 2010 aerial photographs. Stockpiles of material can be seen on the land.
2010 to Current	By 2013 aerial photos suggest the land has been cleared. Development of the surrounding areas southeast of the site and the adjacent Glass Parade have occurred.	

5. POTENTIAL SITE CONTAMINATION

Fill of Unknown Origin

Site observations and comparisons with Google Street View suggest portions of the site have been filled sometime in the period 2010 to 2013. Conflicting anecdotal information in regards to earth works on the site have been obtained by Geo-Logix. The extent and volume of filling and origin of the fill material cannot be confirmed. Anthropogenic material including bricks, concrete, tile, metal and asphalt were observed on site suggesting the importation of filling material has occurred.

The western portion of the site has previously been used as a gravel depot by Council. Aerial photos pre-1980s indicate roads previously ran through this area. Aerial photos from 1990 show this area surfaced with gravel to form access roads.

Based on the above, the potential exists for fill of unknown origin to exist on the site. Contaminants of potential concern (COPC) typically encountered in fill of unknown origin include:

- Total Recoverable Hydrocarbons (TRH);
- Benzene, tolunene, ethylbenzene, xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Heavy metals;
- Organochlorine Pesticides (OCPs);
- Polychlorinated biphenyls (PCBs); and
- Asbestos.

Hazardous Building Materials

Former rural/residential structures observed in the eastern portion of the site historical aerial photographs on the site were constructed during a time where hazardous building materials were likely used (lead-based paint and asbestos). Council records indicated a house removed from the eastern portion of the site was found to comprise asbestos. Aerial photos indicate:

- The house understood to have removed by Council was removed around the late 1980's; and
- A previous larger house/shed structure (observed in 1951 aerial photo) and other smaller shed structures appear to have been demolished prior to this, and the fate of these structures was unable to be confirmed.

Potential exists for hazardous building materials to be buried onsite from the demolition of previous structures.

Agricultural Activities

A number of sheds previously existed on the eastern portion of the site during the occupation of the land by farmers. Petroleum products for the maintenance of machinery and pesticides may have been stored in these sheds. Potential exists for localised petroleum and pesticide impact to shallow soils.

6. PRELIMINARY SOIL SAMPLING

6.1 Sampling Plan

In conjunction with the site history review and site inspection, a limited soil investigation was conducted across the site. The investigation comprised sampling and analysis of eight surface soil samples (S1/0.0-0.2 to S8/0.0-0.2) for COPC comprising TRH, BTEX, PAHs, OCPs, PCBs and heavy metals. Soil sample locations were chosen for broad site coverage.

6.2 Sampling Methodology

Soil samples were collected by hand from the ground surface. Soil samples were placed in laboratory prepared jars, labelled and placed on ice in an esky for transport under chain of custody to a NATA Accredited Laboratory for analysis.

One duplicate sample (D1) was collected of sample S2/0.0-0.2 for Quality Assurance / Quality Control (QA/QC) purposes.

6.3 Assessment Criteria

The following were adopted as Tier 1 Assessment Criteria. Tier 1 Assessment Criteria are generic assessment criteria derived for specific land uses and exposure settings and are inherently conservative. They are not acceptance criteria. If exceeded they trigger the requirement for further assessment to evaluate the implications of contamination under the site specific setting.

The following were adopted as Tier 1 Assessment Criteria for soil.

National Environment Protection Measure (NEPM) Health Based Investigation Level D (HILs D)

HILs are Tier 1 risk based generic assessment criteria used for the assessment of potential risks to human health from chronic exposure to contaminants in soil. They are intentionally conservative and based on a reasonable worst-case scenario for generic land use setting including Residential (HILs A / B), Open Space / Recreational (HILs C) and Commercial / Industrial (HILs D). HILs D soil assessment criteria were adopted on the basis of the land use as commercial.

NEPM Health Screening Levels D (HSLs D)

HSLs are Tier 1 risk based generic assessment criteria used for the assessment of potential risks to human health from chronic exposure of petroleum vapours emanating off petroleum contaminated soils (Vapour Risk). These are intentionally conservative and based on reasonable worst-case scenario for generic soil types, contamination depth, and land use settings including Residential (HSLs A / B), Open Space / Recreational (HSLs C) and Commercial / Industrial (HSLs D). HSLs D were adopted on the basis the proposed development is commercial.

NEPM Management Limits

Management Limits for petroleum have been developed for prevention of explosive vapour accumulation, protection of formation of observable Light Non-Aqueous Phase Liquids (LNAPL) and to protect against effects on buried infrastructure. For the purpose of this investigation, data will be assessed in the context of commercial / industrial land use.

NEPM 2013 Asbestos Criteria

Asbestos assessment criteria are included in NEPM (1999) Amendment. Those criteria apply to the assessment of known and suspected asbestos contamination in soil and address friable and non-friable forms of asbestos. The presence/absence of asbestos contamination was not known at the time of investigation therefore its investigation was of a preliminary nature. Given the preliminary assessment the following Tier 1 assessment criteria were adopted:

- No visible ACM on site surface or in the subsurface at sampling locations.

Soil Ecological Assessment

Soil ecological assessment was not considered warranted based on the following:

- The proposed land use is commercial and the majority of the site will be sealed. Any landscaping surrounding the perimeters will comprise imported topsoil and therefore terrestrial ecology access to soils is not considered an issue.

6.4 Site Geology

The geology encountered during the limited surface soil sampling program comprised the following:

- Gravelly sand earth fill, with the occasional anthropogenic material (asphalt, concrete, bricks) to 0.2 metres below ground (mbg) at S1 – S5 and S8;
- Silty sand with gravels (topsoil or earth fill?) to 0.1 mbg, overlying sandy clay at S6; and
- Sandy clay to 0.2 mbg at S7.

6.5 Soil Analytical Results

Soil analytical results are summarised in Tables 1 through 6. Laboratory reports are presented in Attachment L.

Petroleum Hydrocarbons

Petroleum hydrocarbons were not detected at concentrations greater than the Tier 1 Assessment Criteria in all soil samples analysed (Table 1 and 3).

Heavy Metals

Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc were not detected at concentrations greater than the Tier 1 Assessment Criteria in all soil samples analysed (Table 3).

OCPs

OCPs were not detected at concentrations greater than the laboratory reporting limits in all soil samples analysed (Table 4).

PCBs

PCBs were not detected at concentrations greater than the laboratory reporting limits in all soil samples analysed (Table 5).

PAHs

PAHs were not detected at concentrations greater than the Tier 1 Assessment Criteria in all soil samples analysed (Table 6).

6.6 QA/QC Results

Soil duplicate / triplicate results are within the adopted acceptance criteria of 30-50% (AS4482.1).

A summary of Laboratory QA/QC data is presented on the following table.

Report #	Analysis Within Holding Time	Surrogate Recovery	Lab. Duplicate RPD %	Lab Matrix Spike Recovery	Lab. Control Sample	Lab Method Blank
443967-S	√	√	√	√	√	√

√ = Pass X = Fail -- = not required * = refer to report text

Quality Assurance Criteria

Holding Times

VOCs 14 days soil/water

SVOCs 7 days water, 14 days soil

Pesticides 7 days water, 14 days soil

Metals 6 months

Mercury 28 days

Quality Control Criteria

Accuracy

Surrogate, matrix spike, control sample 70-130% and 30-130% for Phenols. Surrogate recovery 50-150% and 20-130% for Phenols.

Precision

Method Blank Not detected

Duplicate - No limit (<10xEQL), 0-50% (10-20xEQL), 0-200% (>20xEQL)

Geo-Logix accepts the integrity of the analytical data.

7. CONCLUSIONS

The results of the Phase I ESA indicate that the site and surrounding areas has a history of rural/residential landuse and use as a Council Depot for fill storage. Other filling activities have been identified. Potentially contaminating landuse activities that have been identified to have occurred onsite include:

- Possible application of fill of unknown origin on the site;
- Demolition of former site structures constructed from hazardous building materials; and
- Potential petroleum and pesticide storage associated with agricultural activities.

The results of preliminary sampling did not identify COPC at concentrations greater than assessment criteria however based on the above identified site history additional investigation is recommended to assess the presence/absence of land contamination.

8. LIMITATIONS

This report sets out the findings of a preliminary site investigation by Geo-Logix. A detailed site assessment is required before any conclusions may be drawn as to the:

- presence, identity and extent of specific substances, or
- suitability of the Site for any specific use, or category of use, or
- approvals, if any, that may be needed in respect of any use or category of use, or
- level of remediation, if any, that is warranted to render the Site suitable for any specific use, or category of use.

This report should be read in full, and no executive summary, conclusion or other section of the report may be used or relied on in isolation, or taken as representative of the report as a whole. No responsibility is accepted by Geo-Logix, and any duty of care that would or may arise but for this statement is excluded, in relation to any use of any part of this report other than on this basis.

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The works undertaken by Geo-Logix are based solely on the scope of works, as agreed by the Client (**Scope of Works**). No other investigations, sampling, monitoring works or reporting will be carried out other than as expressly provided in the Scope of Works. **A COPY OF THE SCOPE OF WORKS IS AVAILABLE ON REQUEST.**

The conclusions stated in this report are based solely on the information, Scope of Works, analysis and data that are stated or expressly referred to in this report.

To the extent that the information and data relied upon to prepare this report has been conveyed to Geo-Logix by the Client or third parties orally or in the form of documents, Geo-Logix has assumed that the information and data are completely accurate and has not sought independently to verify the accuracy of the information or data. Geo-Logix assumes no responsibility or duty of care in respect of any errors or omissions in the information or data provided to it.

Geo-Logix assumes no responsibility in respect of any changes in the condition of the Site which have occurred since the time when Geo-Logix gathered data and/or took samples from the Site on its site inspections dated **[7 January 2015]**.

Given the nature of asbestos, and the difficulties involved in identifying asbestos fibres, despite the exercise of all reasonable due care and diligence, thorough investigations may not always reveal its presence in either buildings or fill. Even if asbestos has been tested for and those tests' results do not reveal the presence of asbestos at those specific points of sampling, asbestos or asbestos containing materials may still be present at the Site, particularly if fill has been imported at any time, buildings constructed prior to 1970 have been demolished on the Site or materials from such buildings have been disposed of on the Site.

Geo-Logix has not investigated any off site conditions, including the extent if any to which substances in the Site may be emanating off Site, and if so whether any adjoining sites have been or may be impacted by contamination originating from the Site.

Geo-Logix has prepared this report with the diligence, care and skill which a reasonable person would expect from a reputable environmental consultancy and in accordance with environmental regulatory authority and industry standards, guidelines and assessment criteria applicable as at the date of this report. Industry standards and environmental criteria change frequently, and may change at any time after the date of this report.

9. REFERENCES

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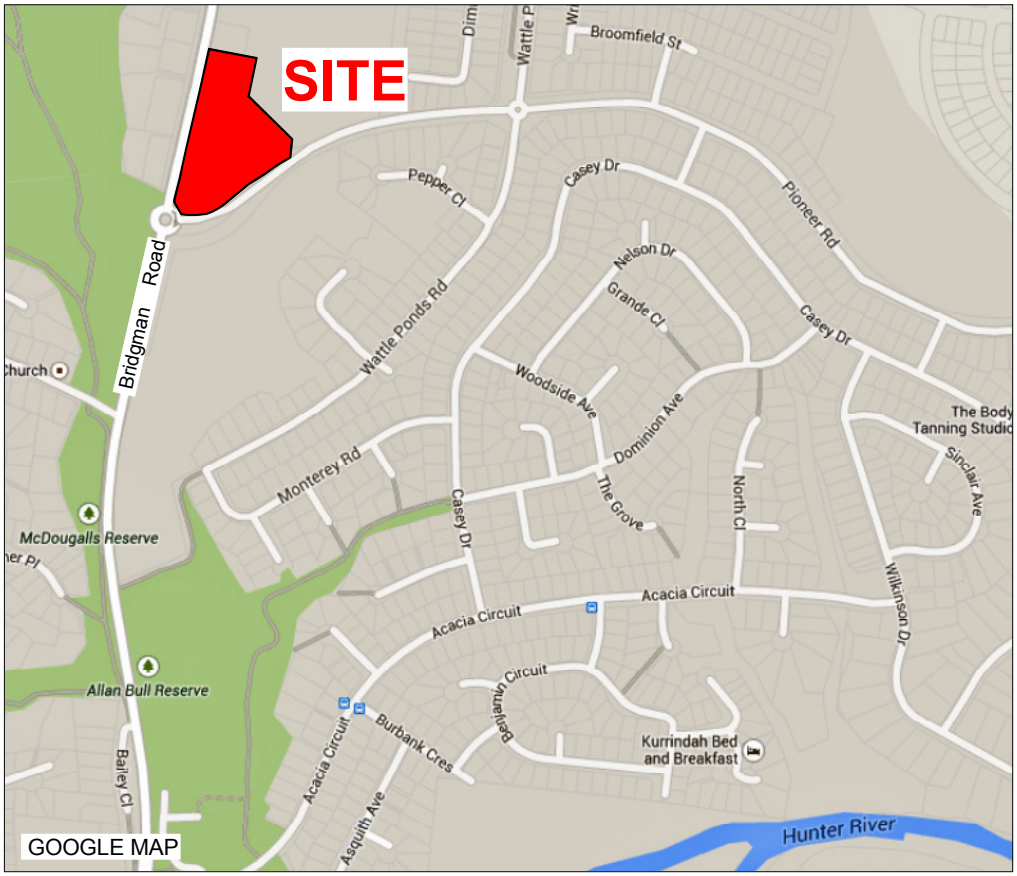
FIGURES



PART MAP HUNTERVIEW, NSW

PART MAP NSW

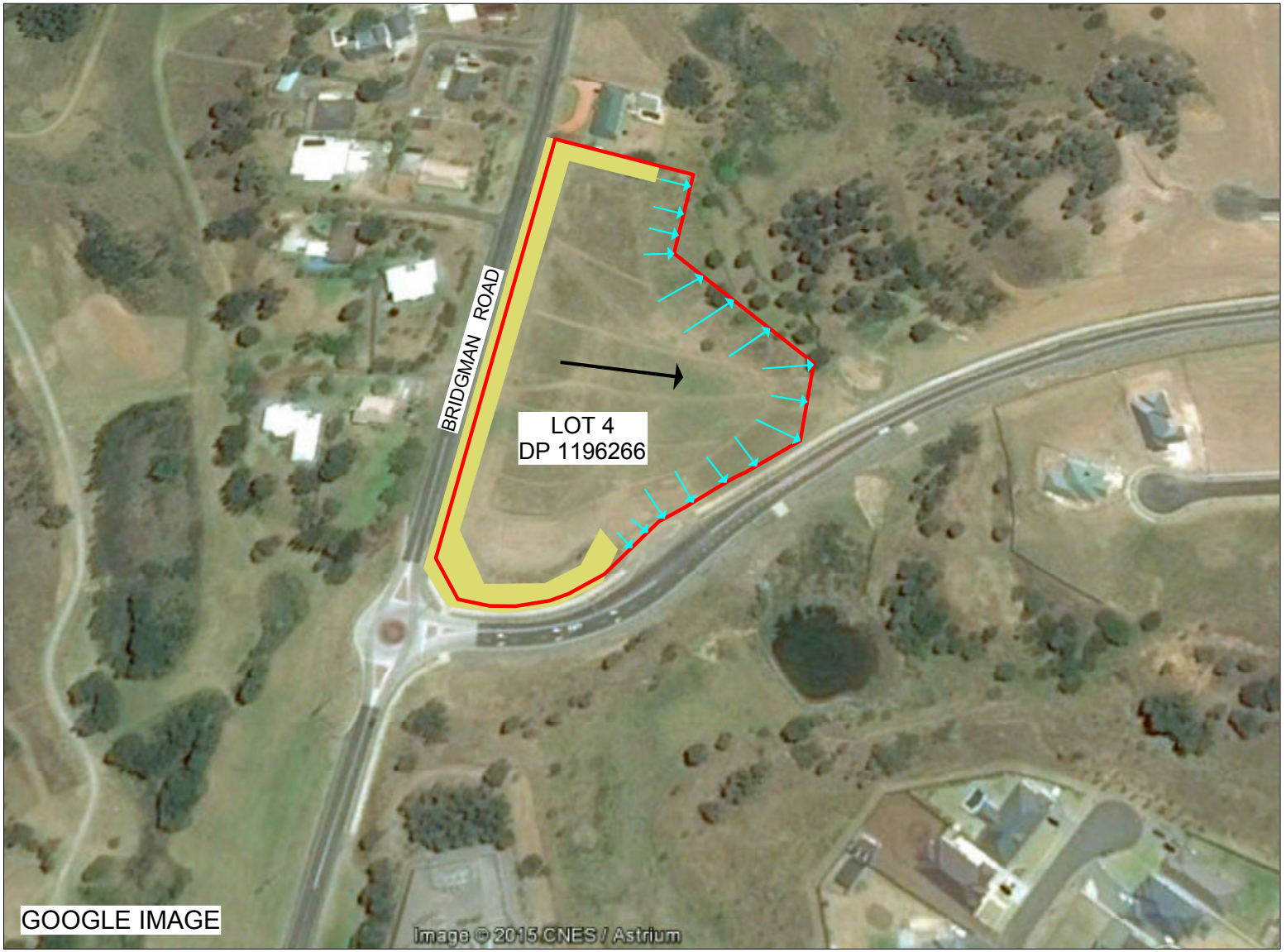
ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED
01		ORIGINAL ISSUE		

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102
Ph: (02) 9979 1722
Fax: (02) 9979 1222

DRAWN:	CHECKED:
J.E.D.	J.S.
APPROVED:	B.P.
DATE:	06/01/2015

SITE LOCATION MAP
PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
LOT 4 DP 1196266, BRIDGEMAN ROAD, HUNTERVIEW NSW 2330

SHEET SIZE:	PROJECT No.	REV:	
A4	1401107	01	FIGURE 1



N

LOT BOUNDARY

FILL MOUND

STEEP SLOPE

SLIGHT SLOPE

10 0 50 100m

SCALE

ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED
01		ORIGINAL ISSUE		

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102
Ph: (02) 9979 1722
Fax: (02) 9979 1222

DRAWN:	CHECKED:
J.E.D.	J.S.
APPROVED:	B.P.
DATE:	06/01/2015

SITE MAP

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

LOT 4 DP 1196266, BRIDGEMAN ROAD, HUNTERVIEW NSW 2330

SHEET SIZE:	PROJECT No.	REV:	
A4	1401107	01	FIGURE 2

N

LOT BOUNDARY

SURFACE SOIL SAMPLES

10 0 50 100m

SCALE

ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED
01		ORIGINAL ISSUE		

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102
Ph: (02) 9979 1722
Fax: (02) 9979 1222

DRAWN:	CHECKED:
J.E.D.	J.S.
APPROVED:	B.P.
DATE:	16/01/2015

SAMPLE LOCATION MAP
PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
LOT 4 DP 1196266, BRIDGEMAN ROAD, HUNTERVIEW NSW 2330

SHEET SIZE:	PROJECT No.	REV:	
A4	1401107	01	FIGURE 3

ATTACHMENT A

Enquiries to: Planning & Sustainable Environment Group
(02) 6578 7290
Our Ref: PN 27043 (App. 22647)
Your Ref: **1401107**

PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Applicant: Ms J Seymour
Geo-Logix P/L
Unit 2309/4 Daydream Street
WARRIEWOOD NSW 2102

Certificate No: 20150013
File No: PN 27043
Receipt No: 1051646
Receipt Date: 06/01/2015
Fee Paid: $133.00

PROPERTY DESCRIPTION:

Lot: 4 DP: 1196266, 1 Glass Parade HUNTERVIEW 2330

OWNER: Singleton Council

ASSESSMENT NUMBER: 167189

PARCEL NUMBER: 27043

ABN 52 877 492 396
Address all correspondence to the General Manager:
PO Box 314
SINGLETON
NSW 2330

DX 7063
SINGLETON

Administration Centre located at:
Queen Street
Singleton

Ph: (02) 6578 7290
Fax: (02) 6572 4197
Email: ssc@singleton.nsw.gov.au
Website: www.singleton.nsw.gov.au

"Singleton. A progressive community of excellence and sustainability."

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PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

ADVICE PROVIDED IN ACCORDANCE WITH SECTION 149(2)

1. Names of relevant SEPPs, REPs, LEPs and DCPs applying to the land

Local Environmental Plans

The Singleton Local Environmental Plan 2013 applies to the land.

Draft Local Environmental Plans

No proposed environmental planning instrument, that is or has been the subject of community consultation or has been on public exhibition under the Act, applies to the carrying out of development on the land.

Development Control Plans

The following Development Control Plans made under Division 6 of Part 3 of the Environmental Planning and Assessment Act 1979 apply to the land (including development control plans made under Section 72 of the Act, or by the Director General under Section 51 of the Act before repeal of those sections):

- Singleton Development Control Plan

State Environmental Planning Policy

The following State Environmental Planning Policies apply to the land:

- State Environmental Planning Policy No. 6 - Number of Storeys in a Building
- State Environmental Planning Policy No. 15 - Rural Land-Sharing Communities
- State Environmental Planning Policy No. 21 - Caravan Parks
- State Environmental Planning Policy No. 22 - Shops and Commercial Premises
- State Environmental Planning Policy No. 26 – Littoral Rainforests
- State Environmental Planning Policy No. 30 – Intensive Agriculture
- State Environmental Planning Policy No. 32 - Urban Consolidation (Redevelopment of Urban Land)
- State Environmental Planning Policy No. 33 - Hazardous and Offensive Development

PLANNING CERTIFICATE UNDER SECTION 149
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

- State Environmental Planning Policy No. 36 - Manufactured Home Estates
- State Environmental Planning Policy No. 44 - Koala Habitat Protection
- State Environmental Planning Policy No. 55 - Remediation of Land
- State Environmental Planning Policy No. 62 - Sustainable Aquaculture
- State Environmental Planning Policy No. 64 - Advertising and Signage
- State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development
- State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- State Environmental Planning Policy (Major Development) 2005
- State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
- State Environmental Planning Policy – (Miscellaneous Consent Provisions) 2007
- State Environmental Planning Policy – (Infrastructure) 2007
- State Environmental Planning Policy - (Rural Lands) 2008
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
- State Environmental Planning Policy (Affordable Rental Housing) 2009
- State Environmental Planning Policy (State and Regional Development) 2011

NOTE:
The above policies apply to the whole of the State and not solely to the land the subject of this certificate. The policies may provide for the land subject of this certificate to be exempted from the requirements of the respective policy due to site specific or development specific considerations.

Draft State Environmental Planning Policy

The following draft State Environmental Planning Policies that have been publicised apply to the land:

- Draft State Environmental Planning Policy (Application of Development Standards) 2004.
- Draft State Environmental Planning Policy No. 66 - Integration of Landuse and Transport.
- Draft State Environmental Planning Policy (Competition) 2010.

PLANNING CERTIFICATE UNDER SECTION 149
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

2. Zoning and land use under relevant LEPs

Zoning under Singleton Local Environmental Plan 2013

The land is zoned B1 Neighbourhood Centre under the provisions of Part 2 in the Singleton Local Environmental Plan 2013.

i) The Singleton Local Environmental Plan 2013 provides that the following development may be carried out without the need for development consent (Item 2 of the Land Use Table):

Home occupations

ii) The Singleton Local Environmental Plan 2013 provides that the following development may not be carried out within the zone except with development consent (Item 3 of the Land Use Table):

Boarding houses; Business premises; Child care centres; Community facilities; Kiosks; Medical centres; Neighbourhood shops; Residential flat buildings; Respite day care centres; Restaurants or cafes; Roads; Shop top housing; Shops; Take-away food and drink premises; Any other development not specified in item 2 or 4

iii) The Singleton Local Environmental Plan 2013 provides that the following development is prohibited within the zone (Item 4 of the Land Use Table):

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; 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; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home-based child care; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Places of public worship; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Residential

accommodation; Resource recovery facilities; Restricted premises; Rural industries; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Wharf or boating facilities; Wholesale supplies

iv) Development Standard for the erection of a dwelling-house

No development standard applies to the land.

Critical habitats

Council does not possess comprehensive mapping of critical habitats within the Singleton Local Government Area (LGA). The Director-General of the NSW Department of Environment and Climate Change has not served a copy of a map of critical habitat on Council identifying that the land includes or comprises critical habitat.

Conservation area/s

The land is not identified in the Singleton Local Environmental Plan 2013 as being in a heritage conservation area.

Environmental Heritage

The land is not identified in the Singleton Local Environmental Plan 2013 as containing an item of environmental heritage.

3. Complying Development under State Environmental Planning Policy (Exempt & Complying Development Codes) 2008

(a) General Housing Code

Under the provisions of the General Housing Code, complying development may be carried out on the land.

(b) Rural Housing Code

Under the provisions of the Rural Housing Code, complying development may be carried out on the land.

(c) Housing Alterations Code

Under the provisions of the Housing Alterations Code, complying development may be carried out on the land.

(d) General Development Code

Under the provisions of the General Development Code, complying development may be carried out on the land.

(e) Commercial and Industrial Alterations Code

Under the provisions of the Commercial and Industrial Alterations Code, complying development may be carried out on the land.

(f) Commercial and Industrial (New Buildings and Additions)

Under the provisions of the Commercial and Industrial (New Buildings and Additions) Code, complying development may be carried out on the land.

(g) Subdivisions Code

Under the provisions of the Subdivisions Code, complying development may be carried out on the land.

(h) Demolition Code

Under the provisions of the Demolition Code, complying development may be carried out on the land.

(i) Fire Safety Code

Under the provisions of the Fire Safety Code, complying development may be carried out on the land.

4. Coastal Protection

The land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act 1979 to the extent Council has been so notified by the Department of Public Works.

PLANNING CERTIFICATE UNDER SECTION 149
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

5. Mine subsidence

The land is not within a proclaimed Mine Subsidence District within the meaning of Section 15 of the Mine Subsidence Compensation Act 1961.

6. Road widening and road realignment

The land is not affected by road widening and/or road realignment under:
(a) Division 2 of Part 3 of the Roads Act 1993, or
(b) An environmental planning instrument, or
(c) A resolution of the Council.

Note: This item relates to Council's road proposals only. Other authorities, including the NSW Roads and Traffic Authority may have road widening proposals.

7. Council and other public authority policies on hazard risk restriction

Landslip, tidal inundation and acid sulphate soils
Council has not by resolution adopted a policy to restrict the development of land because of the likelihood of landslip, tidal inundation or acid sulphate soils.

Bushfire Protection Guidelines
The land is not identified as being bushfire prone and as such is not affected by Planning for Bushfire Protection, adopted by the NSW Rural Fire Service and Council.

Mine Subsidence Guidelines
The land is not affected by the policy document: Buying Property and Building in a Mine Subsidence District adopted by the Mine Subsidence Board.

7A Flood related development controls information

Development on the land/part of the land; is not identified as being subject to flood related development controls. Councils flood related development controls are within the Singleton Local Environmental Plan 2013, the Singleton Floodplain Management Plan, the Singleton

Floodplain Management Development Control Plan and the Singleton Development Control Plan.

8. Land reserved for acquisition

The land affected is not identified on the Singleton Local Environmental Plan 2013 Land Reservation Acquisition Map.

9. Contributions Plan

The following development contributions plans apply to the land:

- Singleton Development Contributions Plan 2008 (Revision 1) for development approved from 5 February 2010 to date,
- Singleton Development Contributions Plan 2008 for development approved between 12 December 2008 to 5 February 2010,
- Singleton Development Contributions Plan 2005 for development approved between 21 October 2005 and 12 December 2008,
- Section 94 Contributions Plan No.1-1993 for development approved prior to 21 October 2005.

9A. Biodiversity certified land

The land is not biodiversity certified land within the meaning of Part 7AA of the Threatened Species Conservation Act 1995.

10. Biobanking agreements

The land is not subject to a biobanking agreement entered under Part 7A of Threatened Species Conservation Act 1995.

11. Bush fire prone land

The land is not identified as being bushfire prone land as defined by the Environmental Planning and Assessment Act 1979.

12. Property vegetation plans

A property vegetation plan, created under the Native Vegetation Act 2003 does not apply to the land (to the extent that Council have been

notified of the existence of such plans by the person or body that approved the plan under the Native Vegetation Act 2003).

13. Orders under *Trees (Disputes Between Neighbours) Act 2006*

An order has not been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (to the extent that Council have been notified of the existence of such an order).

14. Directions under Part 3A

The minister has not issued a direction pursuant to section 75P(2) (c1) of the Environmental Planning and Assessment Act 1979, detailing that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act; does not have effect (to the extent that Council have been notified of the existence of such a direction).

15. Conditions affecting seniors housing

The land does not comprise development subject to the provisions of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.

16. Site compatibility certificates for infrastructure

Council has not been made aware of any valid site compatibility certificates issued under Clause 19 of State Environmental Policy (Infrastructure) 2007 in respect of proposed development on the land.

17. Site compatibility certificates and conditions for affordable rental housing

Council has not been made aware of any valid site compatibility certificate (affordable rental housing), in respect of proposed development on the land.

PLANNING CERTIFICATE UNDER SECTION 149
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18. Paper Subdivision Information

A paper subdivision information plan, created under Part 16C of the Environmental Planning and Assessment Regulation 2000 does not apply to the land.

19. Additional matters prescribed by Section 59 (2) of the *Contaminated Land Management Act 1997*

The land to which the certificate relates is not significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.

The land to which the certificate relates is not subject to a management order within the meaning of the Contaminated Land Management Act 1997.

The land to which the certificate relates is not the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.

The land to which the certificate relates is not subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.

The land to which the certificate relates is not the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997.

PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

ADVICE PROVIDED IN ACCORDANCE WITH SECTION 149(5)

Advice provided in accordance with Section 149 (5) of the Environmental Planning and Assessment Act 1979.

Pursuant to section 149(5), the following advice is provided which pertains to the following matters as applicable:

ARMY ACTIVITIES

The Singleton Army Firing Range is located within the Singleton Area. Some activities, such as artillery firing and aircraft operations impact on the environment beyond the Firing Range boundaries. These activities may result in noise and vibration impacts being experienced on lands throughout the Singleton Local Government Area.

COUNCIL ROAD WIDENING PROPOSALS

The land is not identified as being subject to future road widening proposals by Council.

Note: This item relates to Council's road proposals only. Other authorities, including the NSW Roads and Traffic Authority may have road widening proposals.

EARTHWORKS - Singleton Local Environmental Plan 2013

Clause 7.1: Earthworks in the Singleton Local Environmental Plan 2013 applies to the land. This clause requires development consent for earthworks, unless the earthworks are exempt development, or the earthworks are ancillary to other development for which development consent has been given.

This clause applies to all land to which the Singleton Local Environmental Plan 2013 applies.

RIPARIAN LANDS AND WATERCOURSES

The land is identified on the Singleton Local Environmental Plan 2013 - Riparian Lands and Watercourses Map. Clause 7.6: Riparian land and watercourses in the Singleton Local Environmental Plan 2013 applies to the land. This clause requires the consent authority to consider the following matters, inter alia:

(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,

PLANNING CERTIFICATE UNDER SECTION 149
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

(b) the effect of the development on the likely future use or redevelopment of the land,

(c) the quality of the fill or the soil to be excavated, or both,

(d) the effect of the development on the existing and likely amenity of adjoining properties,

(e) the source of any fill material and the destination of any excavated material,

(f) the likelihood of disturbing relics,

(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,

(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The above information has been taken from Council's records in good faith. Council cannot accept responsibility for any omission or inaccuracy. Where information has been received from a third party, it is recommended that applicants approach that party (or parties) directly for further information and to confirm its authenticity.

Kylie - Anne Pont **For GENERAL MANAGER**	Kylie-Anne Pont
DATE:	**07/01/2015**

ATTACHMENT B

Plate 1 – The southern boundary of the site, looking towards the east.

Plate 2 – The southern corner of the site, looking towards the west.

Plate 3 – Mounded material along the western portion of the site.

Plate 4 – The central portion of the site looking northeast.

Plate 5 – The northwest corner of the site with mounded material along the boundary.

Plate 6 – Mounded material along the northern boundary of the site.

Plate 7 – The eastern boundary of the site, with the southern portion beyond.

Plate 8 – The eastern boundary of the site with the northeast corner beyond.

Plate 9 – Example of anthropogenic material (concrete) in surface material on site.

Plate 10 - Example of anthropogenic material (house brick and concrete) in surface material on site.

ATTACHMENT C

home · help · login
customise

All Groundwater
find a site
- **All Groundwater**
  - North Coast Region
  - Hunter Region
  - Greater Sydney Region
  - South Coast Region
  - Northwest Region
  - Central West Region
  - Southwest Region
  - Far West Region
  - Great Artesian Basin
  - Coal Basins

bandwidth high low
glossary and metadata

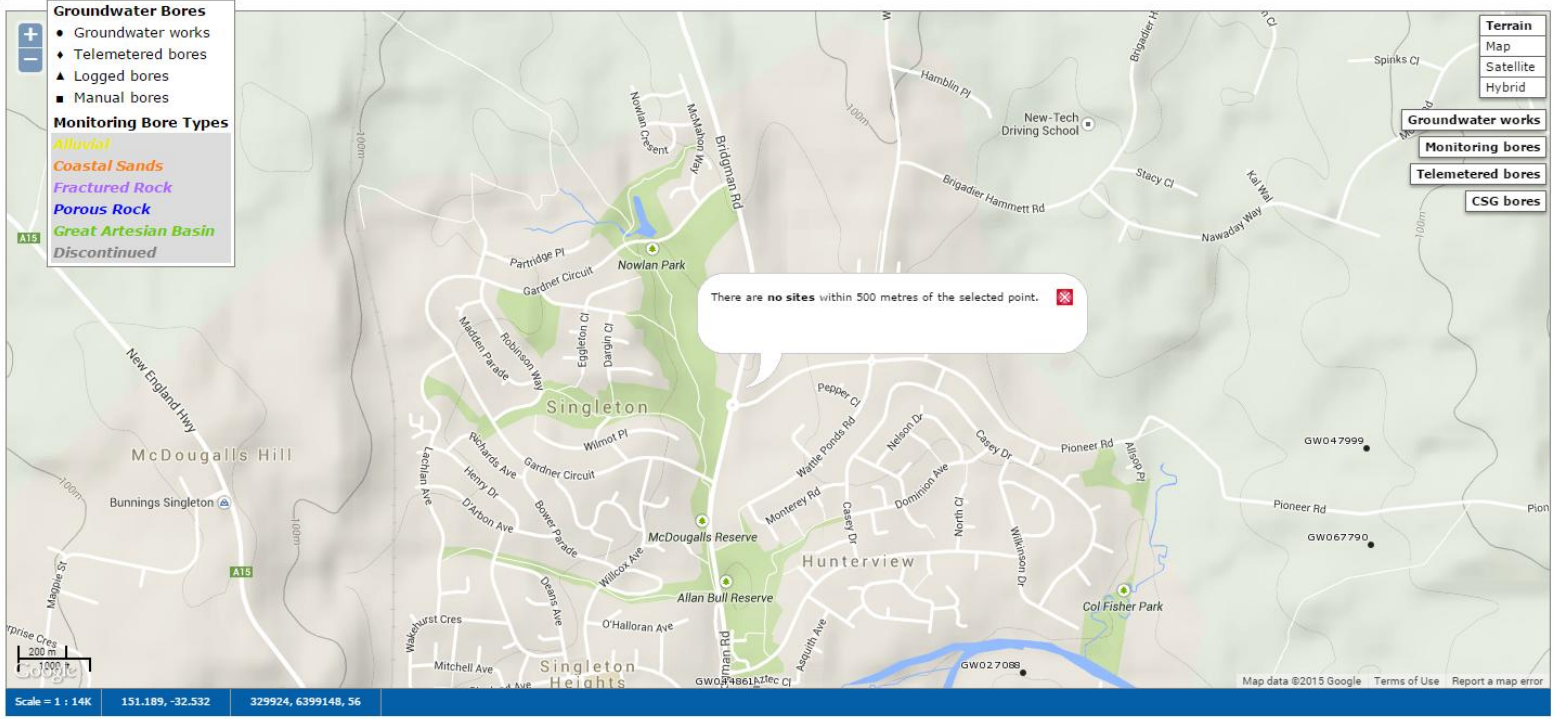
bookmark this page
go back to referring page

All Groundwater

All Groundwater

All data times are Eastern Standard Time

Map | Info



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ATTACHMENT D

Job No 8683401

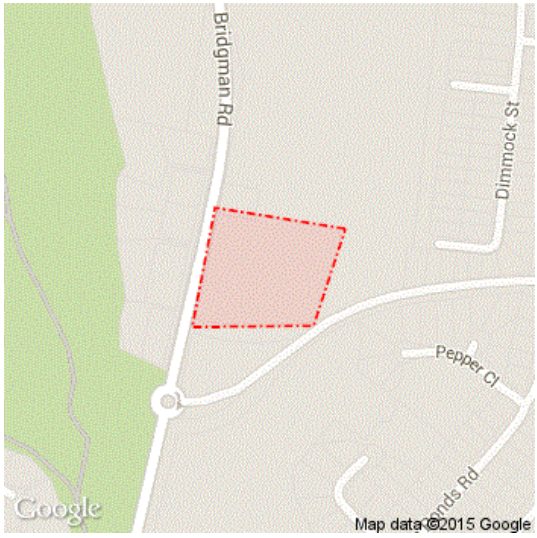
Phone: 1100
www.1100.com.au

Caller Details

Contact:	Miss Jenna Seymour	**Caller Id:**	926297	**Phone:**	0299791722
Company:	Geo-Logix Pty Ltd	**Mobile:**	Not Supplied	**Fax:**	0299791222
Address:	Unit 2309 4 Daydream St Warriewood NSW 2102	**Email:**	jseymour@geo-logix.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.



User Reference: Not Supplied
Working on Behalf of:
Private

Enquiry Date:	Start Date:	End Date:
05/01/2015	08/01/2015	10/01/2015

Address:
Bridgman Road
Hunterview NSW 2330

Job Purpose: Excavation
Onsite Activity: Vertical Boring
Location of Workplace: Private Property
Location in Road: Not Supplied

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should the scope of works change, or plan validity dates expire, you must submit a new enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Not Supplied

Your Responsibilities and Duty of Care

- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
43214674	Ausgrid	0249510899	NOTIFIED
43214673	Singleton Council	0265787290	NOTIFIED
43214675	Telstra NSW, Central	1800653935	NOTIFIED

END OF UTILITIES LIST

If further information is required, please contact:
Ausgrid DBYD
Phone: (02) 4951 0899
Fax: (02) 4951 0729

Emergency Phone Number 131388

Underground Cable Location Search Advice

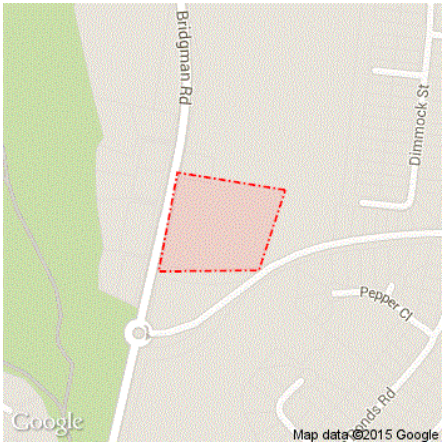
-- Ausgrid Assets Affected –

To:	Miss Jenna Seymour Geo-Logix Pty Ltd Unit 2309 4 Daydream St Warriewood Nsw 2102		
		Phone No:	0299791722
		Issue Date:	5/01/2015

In response to your enquiry, Sequence No: 43214674 the records of Ausgrid disclose that there **are** Ausgrid underground cables in the defined search location and relevant Ausgrid plans have been provided.

This search is based on the geographical position of the dig site as denoted in the Dial Before You Dig caller confirmation sheet and an overview is provided:

Address:	Bridgman Road Hunterview NSW 2330
Job #:	8683401



Important

- All information provided to you is **ONLY VALID FOR 30 DAYS** from the date of issue
- You must keep Ausgrid plans on site during excavation works and have on site a person trained to read Ausgrid plans.
- If you require a full size print of A0 plans and don't have the resources to do so please contact our office on 0249510899 to request a hard copy to be posted. **Please allow 3 working days for delivery.**
- Please note you will ONLY receive portions of your search area that contain Ausgrid Underground Assets

YOU MUST READ AND UNDERSTAND THE *SUPPLEMENTARY MATERIAL* CONTAINED IN THIS ADVICE BEFORE PROCEEDING WITH ANY WORKS.

Summary of Supplementary Information:

Material	Purpose	Location
Important Information.pdf	Details important information	Attached
Working near Ausgrid Cables.pdf	Summary of NS156	Attached
COMN0119 How To Read Ausgrid Plans.pdf	Details how to read Ausgrid plans	Attached
WorkCover NSW "*Work near underground assets: Guide*"	To assist you in deciding appropriate measures to eliminate or control risks when working near underground assets.	Web Link [Click Here]
Ausgrid's Network Standard NS156	For important information for work near or around underground cables	Web Link [Click Here]

SI632 - DI1

2x125 PVC
1X50 PVC
0.7

0.6

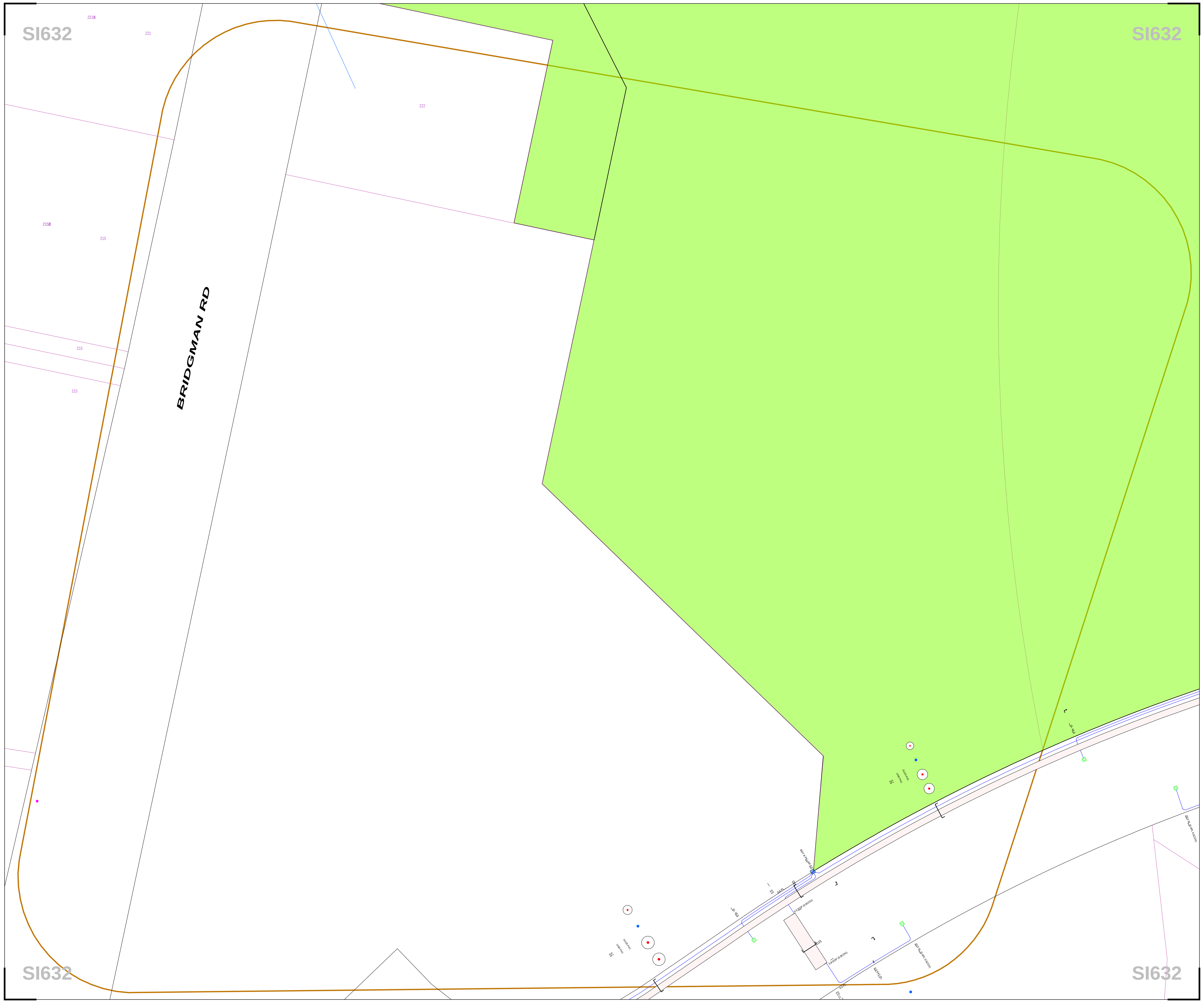
Ref: F8

SI632 - DJ1

6x125 PVC
N/A

0.6-0.8

Ref: G8



WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings.
The plans show no more than the presence or absence of Ausgrid assets in the street.
Persons working near electricity networks must exercise care and will be held responsible for any damage caused.
You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.
Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in WorkCover Code of Practice for Excavation and WorkCover Guide for Work Near Underground Assets
as well as recommendations of Ausgrid's Network Standard NS156.
Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.
Workers must maintain safe approach distances and follow applicable WorkCover Codes of Practice.
NOTE: You must keep this plan on site during excavation works and have on site a person trained to read this plan.

ISG GRID

SI6134	SI6143	SI6144
SI6312	SI632	SI6322
SI6314	SI6323	SI6324

GRID

267D1	267E1	267F1
267D2	267E2	267F2
267D3	267E3	267F3

GMLA0

Distr + Trans - 43214674

INFORMATION ON THIS PLAN ONLY VALID FOR 30 DAYS FROM ISSUE DATE

5 Jan 2015

Page 1 of 1

1:343

0 — 21 metres

N

Ausgrid

A0 MOCS_std_plot

H_43214674_GMLA0_1.hpgl2

Reading Ausgrid Plans

COMN0119

1 Property Lines

"property line" (PL), sometimes referred to as **"building line" (BL)**, is the standard dimensioning reference point on all Ausgrid plans and represents property boundaries.

Typically the PL is the boundary between private property and local council's footpath area or nature reserve. Most residential fences and office blocks are erected along the PL.

"kerb line" (KL) is less frequently referred to on Ausgrid plans, and where used will be identified clearly as KL.

Numbers listed within property boundaries should correspond to recognised "street numbers". (refer to figure 1)

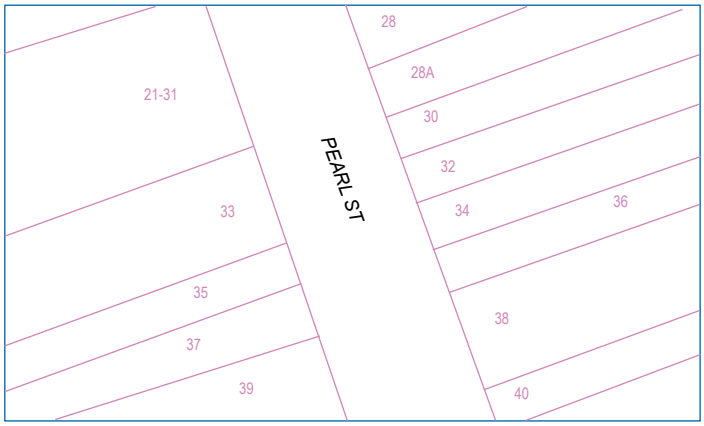


Figure 1

2 Datum References

"datum references" identify distances (in metres) from significant features (such as corners of property boundaries) to reference points such as Ausgrid assets (eg: **"conduits", "cables", "joints"**). (refer to figure 2)

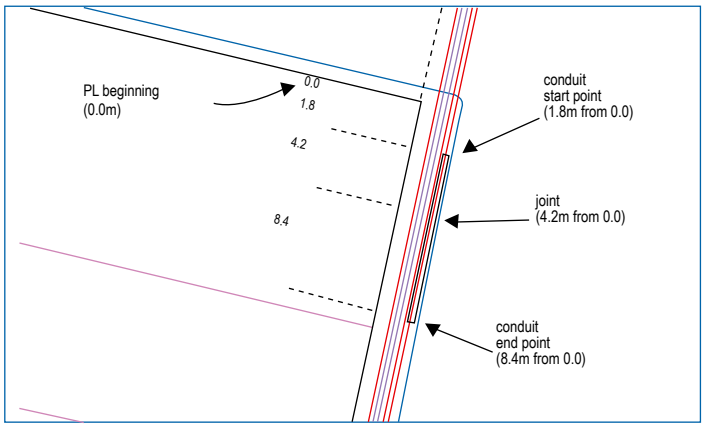


Figure 2

3 Cross Sections

"cross sections" displayed on Ausgrid plans detail information relating to the relative position (ie: distance from the **"property line"**, and the depth of **"cover"**) of Ausgrid assets.

"cover" is a term used to refer to the depth of cables underground.

A "cross section" leader line will be drawn indicating the location of the displayed **"cable"** or **"conduit"** information on Ausgrid plans.

The distance from **"property line"** (in metres) and depth of **"cover"** (in metres) references are displayed as; ie: 0.6 metres from PL and 0.5 metres underground).

Where distance and cover are not recorded, they will be clearly marked as **"NR"**.

NOTE: Distance and cover where indicated may be different to the actual position of the cables (eg: fill may have been placed at site that has changed the ground level).

"PL" distance shown in cross sections is an indicative measure to the centre of the trench allocation from the adjacent property line.

On some plans the "cross sections" may also be shown with a specific number (eg: FC1). This number will have an arrow pointing in the direction you will need to look for the cross-section detail. (refer to figures 3 and 4)

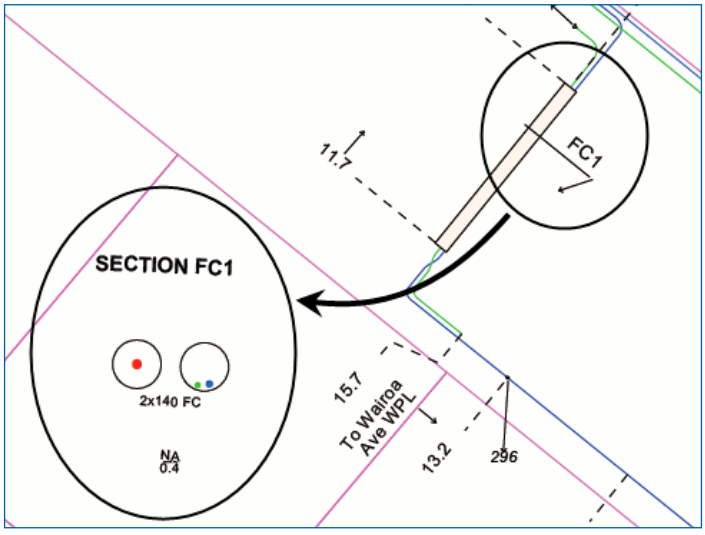


Figure 3

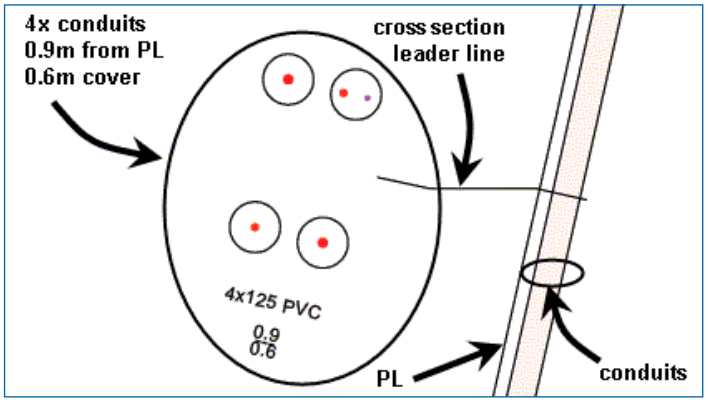


Figure 4

4 Cable Joints and Joint Reports

"cable joints" (numbered individually) and **"joint reports"** (attached to Ausgrid plans) can provide information relating to the relative position of Ausgrid assets, distance from the "property line" (in metres), and the depth of "cover" (in metres). (refer to figures 5 and 6)

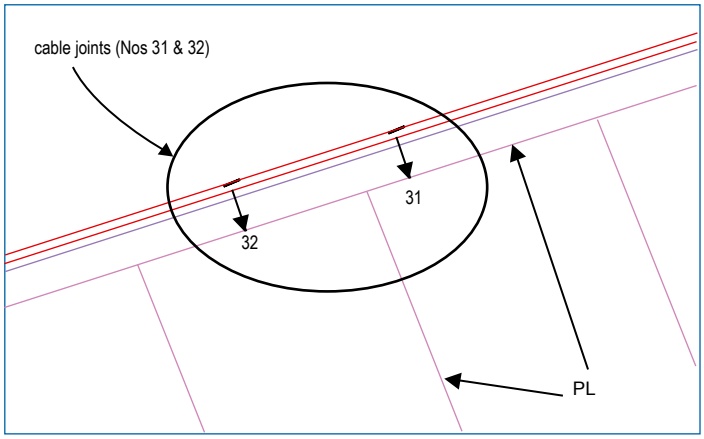


Figure 5

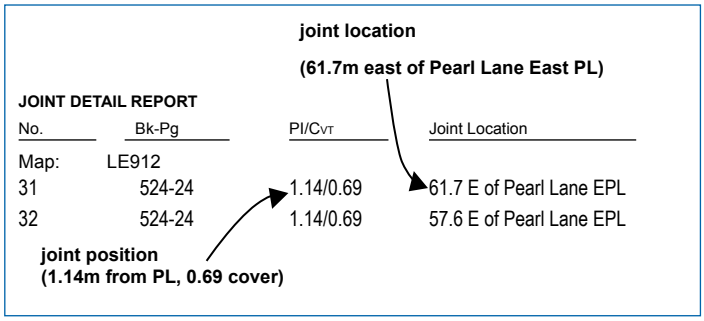


Figure 6

5 Cross Section Detail Boxes

"cross section" *detail boxes* on the sides of an Ausgrid plan are used when there is insufficient room to display **"cable"** and/or "conduit" information on the Ausgrid plan.

Ausgrid plans (refer to figure 7) are bordered by numeric identifiers along the *top and bottom borders* and alpha identifiers along the *side borders*.

Figure 7

A **"cross section"** *leader line* and annotation is drawn on the Ausgrid plan for a reference to **"cable"** and/or **"conduit"** information in the **"cross section"** *detail boxes*.

6 Pits

Underground **"pits"** are numbered on Ausgrid plans, positioned relative to the **"property line" (PL)**, and can be found on either the footpath (nature strip) or the road (see figure 8).

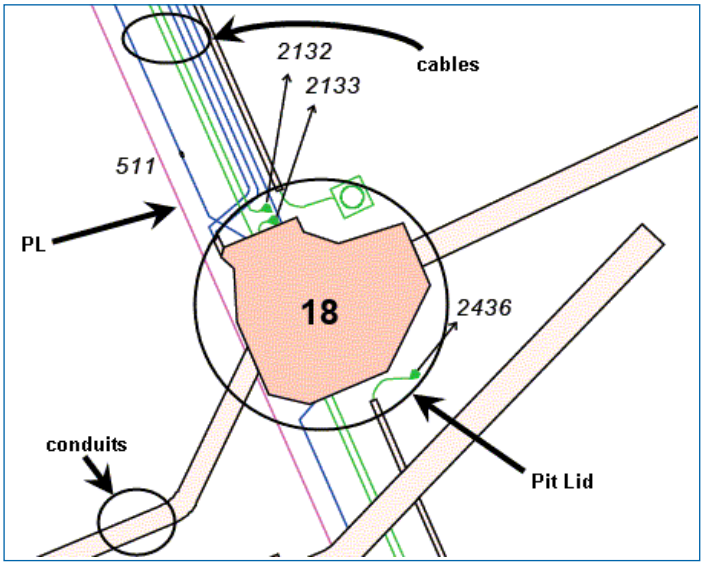


Figure 8

7 Proposal Areas

There are areas where underground work may have been issued for construction by Ausgrid, but details are not yet completely displayed on Ausgrid plans. In such cases a shaded **"proposal area"** is displayed on the Ausgrid plan, indicating underground work may have commenced in the vicinity but is not yet complete.

In some instances cables and other assets within the shaded **"proposal area"** will be shown in a **bright magenta** colour, indicating that the proposed new work displayed within the shaded area is based on initial planning documentation. (refer to figure 9)

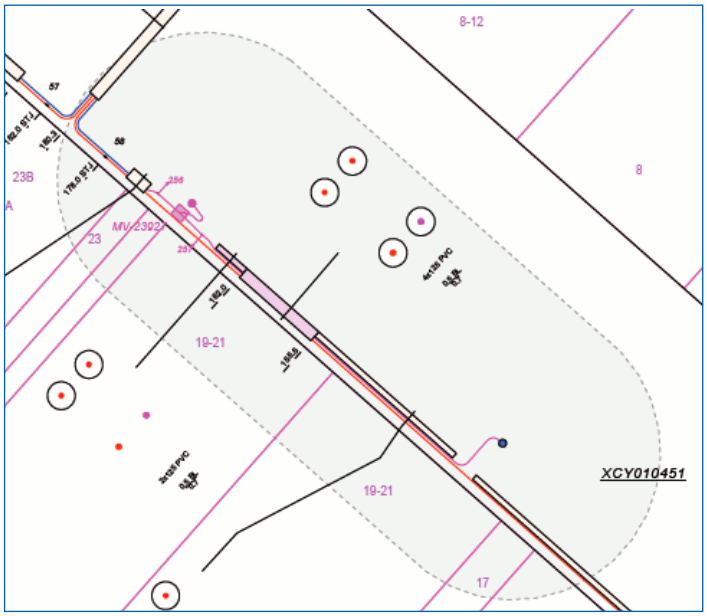


Figure 9

In other instances the shaded **"proposal area"** itself may be shown as a **blue** colour, indicating that the new work displayed within the shaded area on the Ausgrid plan is yet to include details regarding final depths and dimensioning. (refer to figure 10)

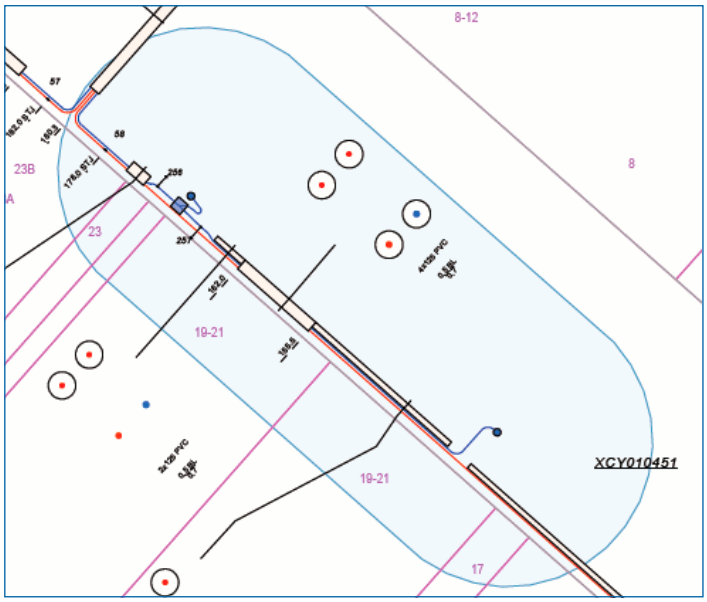


Figure 10

NOTE: In cases where these shaded **"proposal areas"** are displayed on Ausgrid plans.

"Ausgrid's design plans showing the proposed position of its underground cables, overhead lines and structures have been prepared solely for Ausgrid's own planning use. They show the proposed position of such underground cables, overhead lines and structures as proposed at the time of planning and have not necessarily been corrected to take into account any changes to road widths, road levels, fences and buildings subsequent to proposed installation.

Actual installations may vary from proposed installations as it may be necessary to take account of unforeseen above ground or subterranean constructions. Therefore, Ausgrid does not hold out that the design plans show more than the proposed presence or absence of its underground cables, overhead lines and structures in the street and will accept no liability for inaccuracies in the information shown on such design plans from any cause whatsoever."

Any further information regarding information displayed for **"proposal areas"** can be obtained by contacting the Ausgrid DBYD office at the number indicated on the response to your DBYD enquiry for further information.

8 Ausgrid (ISG) Map Grid

The pale grey line indicates the **1:1000 Ausgrid (ISG) map grid** *border*.

The pale grey annotation located in the corners of the Ausgrid plan window, indicates the 1:1000 Ausgrid (ISG) map grid reference.

The **1:1000 Ausgrid (ISG) map grid** *border and reference* on Ausgrid plans should be used when reading the **"joint report"** (see part 4 of this document for more detail) to accurately locate underground cables.

The buffer area shown on the plan should relate to the area requested on the original Dial Before you Dig request.

The **grid index box** can be used for reference where necessary (located in the bottom right corner of the Ausgrid plans), and will also indicate the buffer area shown on the plan.

9 Ausgrid "Distribution" and "Transmission" Plans

The Ausgrid plans supplied may identify both **"distribution"** and **"transmission"** voltage assets for the area defined in the DBYD request. (refer to figure 11)

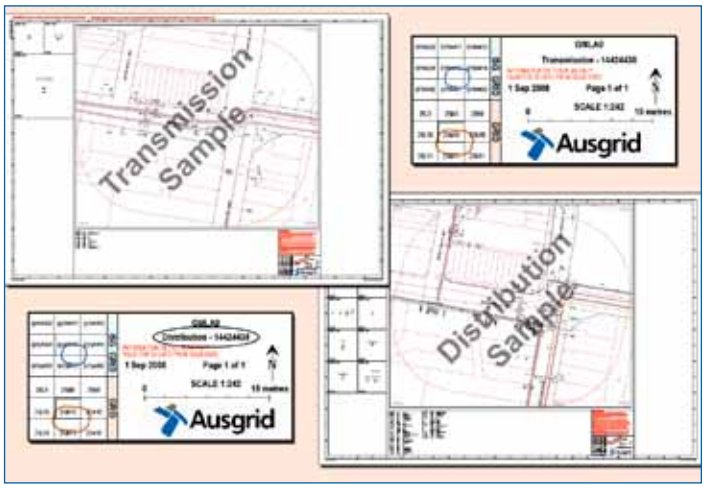


Figure 11

In the Sydney region, the Ausgrid plans are separately labelled as **"Distribution – nnnnnnn"** and **"Transmission – nnnnnnn"**, where "nnnnnnn" refers to the DBYD sequence number quoted.

In the Hunter region, the Ausgrid plans show combined **"distribution"** and **"transmission"** voltage assets, and are clearly labelled as **"Distr + Trans – nnnnnnn"** where "nnnnnnn" refers to the DBYD sequence number.

In the Hunter region, some DBYD requests are covered by PENGUIN grid references. In such cases, the Ausgrid Plans show the grid quoted with a cross-reference to a corresponding Ausgrid (ISG) map grid (eg: PENGUIN 136B3 – DP711, where DP711 is the Ausgrid (ISG) grid) to optimise the legibility of plans due to PENGUIN grid scale.

Some Hunter plans may have transmission cables in the area, when these cables are present there will be a warning printed at the top of the plan supplied:

> **WARNING: If there is work in the vicinity of transmission cables, Ausgrid must be contacted at least two weeks before the work is due to commence.**

10 "Shifting Land Base" on Ausgrid Distribution and Transmission Plans

In some instances, the plans supplied may indicate road or property outlines that appear to have shifted in relation to the Ausgrid assets displayed. (refer to figure 12)

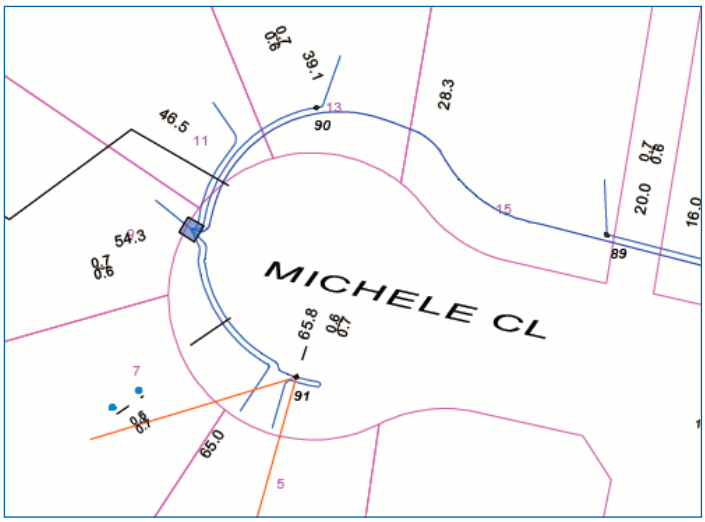


Figure 12

In such instances, always refer to the **"property line"** (in metres) and depth of **"cover"** (in metres) references displayed on the nearest relevant **"cross sections"** to obtain Ausgrid asset location information (see Reading Ausgrid Plans, clause 3, Cross Sections for more detail).

11 "Underground Earthing Infrastructure"

In some instances, the plans supplied may also indicate the presence of underground earthing infrastructure associated with underground and/or overhead Ausgrid assets.

The "Earth Point" symbol (refer to figure 13) will be shown on plans to minimize risk of disturbance or damage to any Ausgrid underground earthing infrastructure in the vicinity.

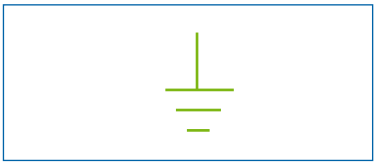


Figure 13

Ausgrid

Emergency Phone Number 131388

IMPORTANT INFORMATION

YOU MUST BE AWARE THAT:

1. There may be underground cables owned by other utilities, in the vicinity of your work, about which Ausgrid has no information.

2. Ausgrid does not usually keep plans of privately owned underground cables or its underground service cables on private property. (Refer NS 156 for further information.)

YOU MUST MAKE YOUR OWN ENQUIRIES IN RESPECT OF THESE CABLES.

YOU MUST UNDERSTAND THAT:

1. Ausgrid takes all reasonable care in providing details of its underground cables. However, owing to changes in road and footway alignments and levels, and the age and incompleteness of some records, it is not possible to conclusively specify the location of all of Ausgrid's underground cables. The accuracy and completeness of the information provided to you cannot be guaranteed. It is intended to be indicative only. It must not be **solely** relied upon when undertaking underground works.

2. Except to the extent that liability may not be capable of lawful exclusion, Ausgrid, its servants and agents will be under no liability whatsoever to any person for loss or damage (including indirect or consequential loss or damage) however caused (including without limitation, for breach of contract, negligence and breach of statute) which may be suffered or incurred from or in connection with the advice provided.

3. Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions must always be taken when undertaking any underground works. Ausgrid's Network Standard NS 156 specifies standards for working in the vicinity of underground cables. It is deemed to be part of this Advice, and it must be read by you.

YOU MUST READ NETWORK STANDARD NS 156 (AUGUST 2010 AS AMENDED BY LATEST NSA), *WORKING NEAR OR AROUND UNDERGROUND CABLES.* IT IS PART OF THIS ADVICE.

If further information is required, please contact:
Ausgrid DBYD
Phone: (02) 4951 0899
Fax: (02) 4951 0729

Emergency Phone Number 131388

Dear Customer,

Ausgrid is currently transitioning its DBYD system to an improved, more efficient automated system.

We have introduced a restriction on the size of enquiries. An “Area Too Large” response will be given to any request that is >1km wide or >1km long or has too much data to process due to the density of the location. An automated response will be sent, with a request to refine your search area and resubmit through Dial Before You Dig.

Thank you for your patience and co-operation throughout this period.

Should you have any enquiries please contact us by email at dbyd.ops@ausgrid.com.au or by phone on (02) 49510899

Regards,
Ausgrid
Dial Before You Dig
Data Maintenance

Working near
Ausgrid cables

Finding out what's below the surface can save your life.

Call Dial Before You Dig on **1100** or visit **1100.com.au**

Ausgrid

Changes in the Law.

NSW legislation now requires people who are planning to do excavation work to obtain copies of underground electricity cable plans through Dial Before you Dig (Phone 1100) and to make sure that the plans are no more than 30 days old when excavation commences.

The aim of the legislation is to ensure that when workers dig near electricity cables, they will establish the exact location of the cables and thus avoid coming into contact with them or damaging them. This will ensure worker safety and also prevent disruption to Ausgrid's electricity network.

This brochure gives you a brief overview of how to prepare for excavation works near or around electricity cables. It is important that you also consult our guide Reading Ausgrid Plans and make sure that workers engaged in excavation works fully understand how to read the plan. If the people actually doing the digging can't read the plans, it is essential that the work is directed by a person who has been trained to read Ausgrid's plans.

You must also consult Ausgrid's Network Standard NS156, which contains comprehensive information concerning all the issues that arise when excavating near underground cables (such as safety hazards from asbestos conduits and organochlorine pesticides).

Excavating near transmission cables.

If any cable plan you receive says "You are working near transmission cables" it is compulsory to notify Ausgrid two weeks before work is scheduled to begin. Ausgrid will then arrange for an Ausgrid representative to attend the site during excavation work.

Phone the Ausgrid Transmission enquiries line on (02) 4951 9200 to arrange for an Ausgrid representative in your region.

Be prepared. Wise words for safety at work.

Here are some simple precautions you and your workers need to follow in order to be as safe as possible.

- Make sure that you have the latest cable plan available
- Keep a copy of the cable plan on site at all times
- Make sure the excavation work is conducted or directed by staff who are trained to read the plan
- Hand dig until the exact location of the cable has been established
- Have on site at all times a first aid kit and a person trained in resuscitation
- Wear protective clothing, including safety footwear and safety helmet
- Have emergency contact numbers on site
- Set up safety barriers, witches hats and warning lights to reduce the risk of injury to the general public
- Comply with all WorkCover requirements and codes.

See also:

- **WorkCover Guidelines: Work Near Underground Assets**
- **WorkCover Code of Practice: Excavation Work**
- **WorkCover Code of Practice: Work Near Overhead Powerlines (if applicable).**

Before you start. Complete the checklist. Stop and look around.

Before you start excavating, consult the flow chart and fill in the checklist at the end of this brochure.

Then, be sure to look for clues where cables might be located on the site: for example pits, distribution pillars (green and other colours), cables attached to the side of poles, street lights without overhead wires.

Do all power cables look the same?

No. Power cables come in different sizes, colours and coverings. They may be covered in black plastic sheath, steel wires in a sticky bitument like material, or even a simple lead or steel wire/tape sheath.

What else should I look for below ground level?

Cables may also be buried in orange PVC or PE conduits or even in earthenware or steel pipes. A bank of cables may be covered with electrical bricks, plastic warning markers or protective covers, or they may not be covered at all. If they have been buried close to the surface, they may be covered by concrete slabs or steel plates.

When in doubt, ask Ausgrid.

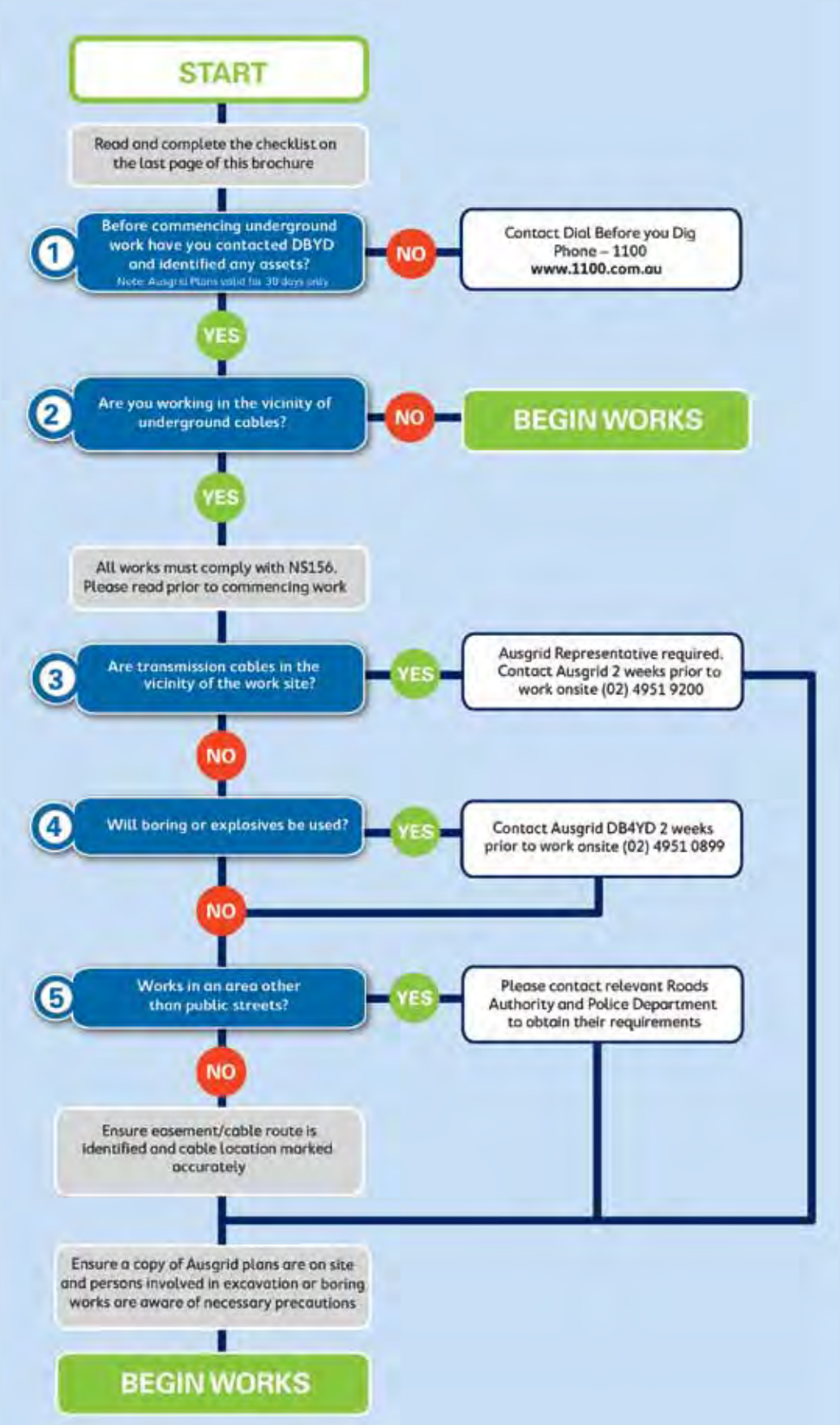
If you have any questions about excavating near Ausgrid cables, read **NS156** (available at ausgrid.com.au).
For further information call 13 15 35.

You've taken every precaution but accidents still happen. What now?

If you damage an electricity cable, it is compulsory to notify Ausgrid on **13 13 88**.

Striking power cables can cause serious damage to the cables and endanger the lives of anyone who comes in contact with them. Machinery and hand operated plant such as jack hammers can become alive if it is in contact with electrical cables or equipment. Keep people well away from machinery and the work site if contact is made with a cable.

Flow Chart for work near Ausgrid Cables



Ausgrid Checklist for work near or around underground cables

It is the responsibility of the Constructor to ensure that underground pits, ducts and cables are not damaged as a result of construction work. It is also your duty to protect your workers from harm or injury. This Checklist is intended to be used as a guide to what Constructors should do to make sure they have satisfied the minimum requirements to minimise damage to underground networks.

PLANS, LOCATION and NOTIFICATIONS	Completed
All relevant utilities plans obtained from Dial Before You Dig? (call 1100 – allow at least 5 working days for plans).	
Checked issue date on all the above plans to ensure issue was within the last 30 days?	
Examined plans and assessed all possible impacts on Ausgrid's network?	
Do you have both Underground Distribution and Transmission Plans (if applicable), on site at all times?	
All cables and conduits shown on the Ausgrid plans been located and marked on the ground?	
If you are planning to use a bore, have you ensured that the equipment is calibrated?	
Have you read and understood the requirements of NS 156? (for copies of NS 156 visit Ausgrid's Website or phone Ausgrid DB4YD Office (02) 4951 0899) **www.ausgrid.com.au**	
Have you notified Ausgrid as specified by NS 0156 and complied with requirements? Where an Ausgrid representative is required, two weeks notice is required before work commencing on site. Contact phone number for Transmission cable enquiries is (02) 4951 9200. For all other cases contact Ausgrid DB4YD Office: (02) 4951 0899.	
INSPECTION OF WORK BY Ausgrid's REPRESENTATIVE	
Is the Ausgrid representative on site for any work near or around* any transmission cable before you start? (*Refer to NS 156.)	
For proposed work near or around* cables other than transmission and/or conduits, are any requirements specified by Ausgrid's representative clearly understood and ready to be applied before you start the work? (*Refer to NS 156.)	
PROTECTION	
Check that all people on-site have been made aware of the presence and location of ALL Ausgrid underground cables and/or conduits; especially boring, drilling and trenching machine operators?	
Is there any asbestos or asbestos containing material in Ausgrid's underground network assets?	
Have you checked for the presence of any Organo-Chloride Pesticides (OCP) in transmission trenches?	
Is the site supervisor monitoring all machine operators working near or around Ausgrid's underground cables and/or conduits?	
Are the requirements specified by Ausgrid's representative being followed?	
Are Ausgrid's requirements in place for any exposed cables and/or conduits to be supported and protected?	
Have you marked all exposed underground cables and/or conduits with flags that are clearly visible from within all machinery used on-site?	
Have safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/or conduits in areas that are at risk?	
Have safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/ conduits in areas that are at risk?	

In the event of DAMAGE to Ausgrid's cable or conduits, call 13 13 88 immediately.
PROCEED with CAUTION

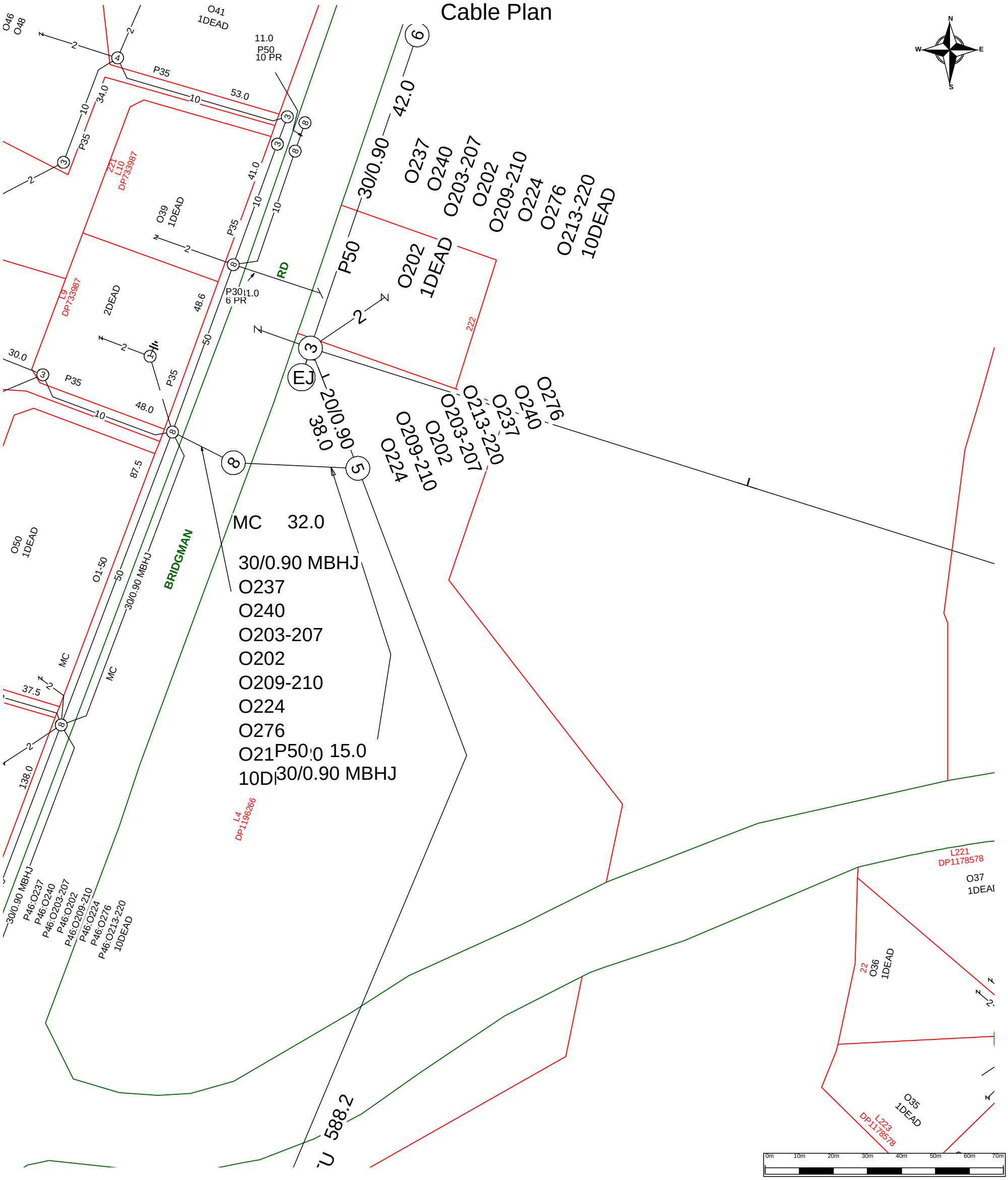
It is your responsibility to protect Ausgrid's cables and conduits from damage and your Duty of Care to protect your workers from harm or injury.

Signed: _____ **Date:** _____ / _____ / _____

Responsible person on site

For more information call 13 15 35 or visit www.ausgrid.com.au

Cable Plan



Telstra	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	
Generated On 05/01/2015 18:43:43	

Sequence Number: 43214675

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

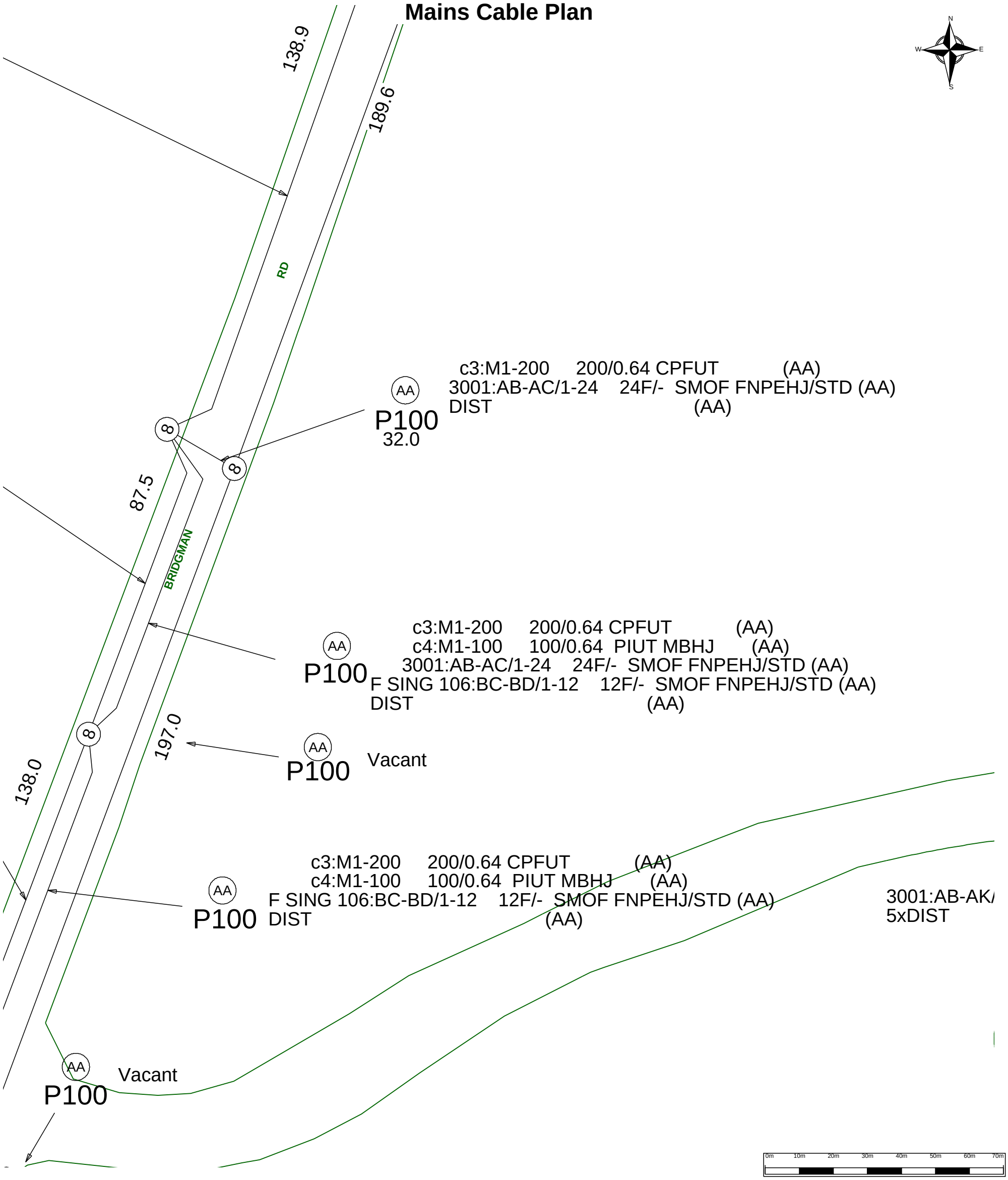
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Mains Cable Plan



Telstra	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	
Generated On 05/01/2015 18:43:48	

Sequence Number: 43214675

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

Telstra Accredited Plant Locators - New South Wales (Central Region)

Telstra plans are intended to be indicative only. A plant location service (Telstra accredited) is required to identify the exact location of the plant and ensure that the asset is protected during construction work. It is your responsibility as part of your "Duty of Care" to engage an Accredited Plant Locator.

Please contact a Telstra accredited locator from the list below (fees apply).

***Optic fibre cable locations** must be performed by a locator with Telstra optic fibre location accreditation. Locators with Telstra optic fibre cable location accreditation are indicated by a 'yes' in the 'Fibre' column.

Name & areas covered	*Fibre	Contact details
Abel Pipe and Cable Locating Pty Ltd – *Werrington County. Sydney Suburbs, Blue Mountains, Gosford, Wollongong*	Yes	0423 644 742 Email: abellocating@bigpond.com
Abitek Pty Ltd - *Rouse Hill*	No	(02) 4580 9883 or 0413 327 243 Fax: (02) 4580 9884
Absolute Locating Services Pty Ltd - *Pennant Hills*	No	(02) 9939 6978 or 0425 257 147 Fax: (02) 9484 7313
Ace Pipe Locating - *Chester Hill* *All Areas, Sydney, Parramatta, Penrith, Ryde, Liverpool, Sutherland Shire, Bankstown, Wollongong, Central Coast*	Yes	0467 002 222 Fax: (02) 9644 2308
Action Locating *Sydney, Newcastle, Wollongong*	Yes	0415 228 466 (02) 9671 5600
Advanced Ground Locations - *Maitland* *Newcastle, Hunter Valley, Central Coast*	Yes	(02) 4930 3195 or 0412 497488 Fax: (02) 4930 3222
All About Pipes - *Leppington*	Yes	(02) 9606 2320 or 0408 790 010 Fax: (02) 9606 2325
Aquabend Utility Detection - *Mirrabooka*	Yes	0488 925 432
Aquatek Australia Pty Ltd - *Brookvale* *All Areas*	No	(02) 99717177 or 0418 612 445 Fax: (02) 9939 7771
Ausflow Pty Ltd - *Balmain*	No	(02) 9555 7979
Australian Locating Services Pty Ltd – *Woolooware* *All of New South Wales*	Yes	1300 761 545 or 0412 227 434 Fax: (02) 9531 2169 Email: admin@locating.com.au
Australian Subsurface - *Canberra* *Canberra, ACT & NSW*	Yes	0427 879 600 Email: admin@australiansubsurface.com Website: www.australiansubsurface.com
Australian Utilities Management Pty Ltd - *Frenchs Forest*	No	0424 537 952

Name & areas covered	*Fibre	Contact details
Barry Bros Specialised Services - Milperra	Yes	(02) 8723 8777 or 0417 374 252 Fax (02) 9773 0777
Bedrock Bobcat & Excavation Pty Ltd - *Kiama Downs*	No	(02) 4237 5659 Fax (02) 4237 8029
Bradmac Locating Services – *Winmalee* *Bathurst, Lithgow and surrounding areas*	Yes	0434 157 409 Fax (02) 4754 3735
Cardno Australian Underground Services Pty Ltd *Riverstone*	Yes	(02) 9627 5988 or 1300 224 664 Email: cardnoaus@cardno.com.au
Chris Bates and Associates - *Tighes Hill* *Mid North Coast, Newcastle, Hunter Valley and Central Coast*	Yes	0408 427 391 Fax (02) 4969 4028
Civil Directions Pty Ltd - *Ourimbah* *Central Coast, Newcastle, Hunter Valley, Lake Macquarie, Hornsby Area*	No	0412 360 921 Email: info@civildirections.com.au
Civilscan Pty Ltd - *Terrigal* *Sydney all areas, Central Coast*	Yes	0416 068 060 Email: civilscan@bigpond.com
Coastal Cable Locators Pty Ltd – *Bawley Point* *Wollongong to Eden, Braidwood, Bungendore, Goulburn*	Yes	(02) 4457 1258 or 0427 975 777
Concrete and Utility Scanning Services – *Miranda* *ACT, Wollongong, Nowra, Goulburn, Sydney, Gosford, Newcastle, Ulladulla*	No	0487 449 376 Fax: (02) 9531 2391 Email: davidchristlo1@gmail.com
Datateks Pty Ltd. – *Wagga Wagga* *All NSW areas*	Yes	0408 693 660 02 6971 7777 Website: www.datateks.com.au
Down Under Consulting - *Wahroonga*	No	0408 150 345
Down Under Detection Services - *Rose Bay*	No	(02) 9371 7744
Down Under Pipeline Surveys Pty Ltd - *Orangeville*	No	(02) 4653 1286 or 0418 675 374 Fax (02) 4653 1747
Durkin Construction Pty Ltd - *Auburn* *All Areas*	Yes	(02) 9712 0308 or 0413 158 255 Fax (02) 9712 0206
EJ Russell Plant Hire - *Bathurst* *Bathurst and surrounding areas*	Yes	0428 874 832
Far West Communication – *Broken Hill* *NSW Areas – Cobar, Menindee, Tibbaburra, Ivanhoe & surrounding areas* *S.A Areas – Eastern Regions of S.A including Mingary and Cockburn*	Yes	0439 350 355
GBG Australia Pty Ltd - *Sydney*	No	(02) 98 90 2122 or 0433 940 477 Fax: (02) 98 90 2922 Email: tuan@gbgoz.com.au
Geoscope Utility Detection Services Pty Ltd - *Raby* *Sydney Areas and parts of NSW*	No	0432 296 323 Email: info@geoscopelocating.com.au

Name & areas covered	*Fibre	Contact details
Geotrace Pty Ltd - *Kings Langley* *All Areas, Hills District, Sydney, Wollongong, Newcastle, ACT, Sutherland, Bankstown, Richmond, Burwood, Rose Bay, Balmain*	No	(02) 8824 6654 or 0417 147 945 Fax: (02) 8824 5637 Email: antony@geotrace.net.au
G & C McCorkindale - *Dubbo, Young, Wagga* *Yass, Goulburn, Bathurst, Orange, Temora, West Wyalong & most NSW country regions, Burwood, Rose Bay, Balmain*	Yes	0408 822 428 Fax: (02) 6382 2639
Ground Scan Locating – *White Rock* *Bathurst & Central West*	Yes	0414 640 640 Fax (02) 6332 2599
GVS Irrigation Enterprises – *Wagga Wagga* *Wagga Wagga & surrounding areas*	Yes	0427 075 547 (02) 6921 6747 Email: gerry@gvsirrigation.com.au
Hi-Tech Locations - *Barnsley* *Newcastle, Hunter Valley, North Coast, South Coast*	No	(02) 4953 4226 or 0466 583 962 Fax: (02) 4953 4227
Hunter Ground Search - *Cameron Park* *Central Coast, Hunter Valley, Newcastle*	Yes	(02) 4953 1244 or 0418 684 819
Hunter Smith Management *NSW & ACT*	No	(02) 8090 2695 or 0422 224 761 Fax (02) 8282 5056
Hunter Valley Excavations Pty Ltd - *Muswellbrook* *Singleton, Muswellbrook, Aberdeen, Scone, Murrurundi, Merriwa*	No	0427 949 507 Fax: (02) 6541 5280
Hydro Digga - *Korora* *All of NSW, ACT and South East Queensland*	Yes	0447 774 000
K –Far Rural Services – *Singleton* *Hunter Valley*	No	0488 790 752 Email: richard@k-far.com.au
KCE Pty Ltd – *East Maitland*	No	(02) 4922 5000 Fax (02) 4922 5001 Email: garyw@kce.com.au
Laneyrie Electrical Pty Ltd - *Dapto* *Helensburg to Ulladulla, Southern Highlands*	Yes	(02) 4262 8166 or 0412 079 079 Fax (02) 4260 9193 Email: gazza7979@gmail.com
Locaters – *St Ives* *Sydney, Penrith, Richmond, Macarthur, Wollongong*	Yes	(02) 8214 8911
Lynco Pty Ltd t/as Lyntet Communications - *Dubbo* *Dubbo, Forbes, Grenfell, Parkes, Bourke, Bourke North, Nyngan, Coonabarabran, Coonamble, Mudgee, Narromine, Wellington, Orange, Molong, Yeoval, Coolah, Dunedoo, Gilgandra, Mendooran*	Yes	0409 811 673 Fax (02) 6882 9856
Metro Resources Group Pty Ltd - *Revesby*	No	(02) 9773 3700 Fax: (02) 9792 4912
MIA Pipe & Cable Layers Pty Ltd – *Griffith* *Griffith, Leeton, Narrandera and surrounding areas*	No	0418 501 050 Email: kb@miapcl.com.au

Name & areas covered	*Fibre	Contact details
Mirait Technologies Australia – *Lisarow* *Central Coast and Hunter Valley*	Yes	(02) 4329 9900 Fax (02) 4329 9950 servicelocations@ccts.com.au
Mr Mac Vacuum Excavations - *Orange* *Bathurst, Yass, Goulburn*	Yes	0447 818 260 mrmacvactruck@bigpond.com
Newcastle Locating Services - *Metford* *Newcastle, Hunter Valley, Upper Hunter Valley, Port Stephens*	Yes	(02) 49 335160 or 0410 698 599 Fax: (02) 4933 5150 Email: afarcas@bigpond.com
Non Destructive Excavation Australia Pty Ltd – *Baulkham Hills*	No	0411 242 141
On Point Utility Locating Pty Ltd - *Woodpark* *Sydney, Parramatta, Penrith, Wollongong, Central Coast, Highlands, Goulburn, Blue Mountains*	Yes	Mob:0405 149 529
Online Pipe & Cable Locating - *Girraween* *Sydney, Newcastle, Canberra, Central Coast, Wollongong, Blue Mountains and Port Macquarie*	Yes	1300 665 384 or 0418 402 234 Fax (02) 9676 6127
Optical Fibre Technologies - *Mortdale* *Sutherland, Sydney Metro, All Areas*	No	(02) 9153 0533 or 0402 354 322 Fax: (02) 9153 0833 Email: opticaltek1@aol.com
Pennoscan - *Blacktown*	No	1800 459 879 or 0403 908 099 georgev@pennoscan.com.au
Riteway Traffic Control - *Charmhaven* *Central Coast - Newcastle/Hunter*	Yes	0419 212 969 email: kbrowne@ritewaytc.com.au
Riverina Horizontal Boring Pty Ltd - *Wodonga*	No	(02) 6059 1788 or 0419 149 153 Fax: (02) 6059 5090
Rubicof – *Cessnock* *Gosford, Newcastle, Taree*	Yes	(02) 4990 5718 or 0418 683 451 Fax: (02) 4991 2600
Seek Locations Pty Ltd – *Depots at Tuncurry and Lake Cathie* *Forster, Gloucester, Taree, Port Macquarie, Karuah, Kempsey*	Yes	(02) 6555 8550 or 0407 256 858 Fax (02) 6555 2548 seek@seeklocations.com.au
Sewer Services Pty Ltd - *Blacktown*	No	(02) 9676 3742 or 0419 986 912 Fax: (02) 9676 8035
Shamrock Civil - *Birkdale*	No	0424 605 497
Signal Support Services - *Goulburn* *Goulburn, Southern Highlands, Canberra*	No	(02) 4821 8334 or 0418 237 668 Fax: (02) 4821 0203
Siteline Projects Pty Ltd – *North Manly* *Greater Sydney, Newcastle*	No	1300 788 814 or 0418 215 441 Fax: (02) 9938 3172
Suk Truk Services Pty Ltd - *Branxton* *Lower & Upper Hunter Valley, Mid North Coast, Central Coast, Newcastle*	Yes	0419 125 551 Fax: (02) 4938 3418
Sydwide Concrete Saw & Pipe Locators Pty Ltd	No	0400 815 095 Fax: (02) 9822 7048

Name & areas covered	*Fibre	Contact details
Tamworth Precision Excavations - *Tamworth*	No	(02) 6760 7722 or 0428 668 728 Fax: (08) 6760 7755
Utility Locating Pty Ltd t/as Suresearch - *Wentworthville Sydney, Penrith, Richmond, Wollongong, Katoomba, Macarthur, Central Coast, Newcastle, Maitland, Hunter Valley, Port Macquarie*	Yes	1300 884 520 or 0408 221 046 Fax: (02) 8915 1487
Vacsafe - *Mudgee*	No	0414 810 652 Fax: (02) 6372 4753
Vac-U-Digga Pty Ltd - *Kemps Creek Sydney, Wollongong, Newcastle, Blue Mountains, Coffs Harbour, Lismore*	Yes	1300 822 834 Mob: 0447 739 212 Fax: 07 3807 5599
Worth Recycling Pty Ltd – *San Souci*		0448 071 662

DUTY OF CARE

TELSTRA CORPORATON ACN 051 775 556

IMPORTANT:

Please read and understand all the information and disclaimers provided below.

Due to the nature of Telstra plant and the age of some cables and records, the accuracy and/or completeness of the information on the attached plan(s) cannot be guaranteed. **Telstra plans are intended to be indicative only. A plant location service (Telstra accredited) is required as part of the process to identify the exact location of the Telstra asset and ensure that the asset is protected during construction work. The exact location of Telstra assets can only be confirmed by physically exposing it.**
Sketches and Plans provided by Telstra are circuit diagrams only and indicate the presence of telecommunications plant in the general vicinity of the geographical area shown. Exact ground cover and alignments cannot be given with any certainty and may alter over time. Telecommunications plant seldom follows straight lines and careful on site investigation utilising a Telstra Accredited Locator is essential to uncover and reveal its exact position.

Telstra DBYD plans are not suitable for locating Telstra network within a Telstra exchange site.
For advice on locating Telstra network within a Telstra exchange site contact Telstra Plan Services.

"DUTY OF CARE"

When working in the vicinity of telecommunications plant you have a "Duty of Care" that must be observed.

Works or proposed works should be planned to allow for minimal impact and appropriate protection of Telstra plant. Telstra can provide plans and sketches showing the presence of its network to assist at the design stage. Telstra will also work with you to avoid damage to Telstra's plant during construction works.

It is your responsibility to:

1. Request plans of Telstra plant for a particular location at a reasonable time before construction begins. ***http://www.1100.com.au***
2. ***Engage an Accredited Plant Locator who must have a current Telstra issued accreditation card**. A list of accredited locators is attached to this email. (Allow enough time to arrange for one).
3. Visually locate Telstra plant by hand digging or using non destructive water jet method (pot holing) where construction activities may be next to, damage or interfere with Telstra plant (see "Essential Precautions and Approach Distances" section for more information); and
4. Contact Telstra's Plan Services (see below for details) if Telstra plant is or near to, wholly, or partly located near planned construction activities and you require further advice about how to protect the plant or you need to relocate the plant to complete your construction activities. ***(Telstra.Plans@team.telstra.com)***

*For details on how to become an Accredited Plant Locator to be able to locate Telstra network please contact Telstra Plan Services – Mike (0477 377 036) mugl@dominoapp.in.telstra.com.au

Important note: *The construction of Telstra's network dates back over many years. Some of Telstra's pits and ducts were manufactured from asbestos-containing cement. You must take care in conducting any works in the vicinity of Telstra's pits and ducts. You must refrain from in any way disturbing or damaging Telstra's network infrastructure when conducting your works. We recommend that before you conduct any works in the vicinity of Telstra infrastructure that you ensure your processes and procedures eliminate any possibility of disturbing, damaging or interfering in any way with Telstra's infrastructure. Your processes and procedures should incorporate appropriate measures having regard to the nature of this risk.*

ASSET RELOCATIONS

You are not permitted to relocate or alter or repair any Telstra assets or network under any circumstances.

For all enquiries relating to the relocation or protection of Telstra assets please phone **1800 810 443** or email **F1102490@team.telstra.com**

Only Telstra and its contractors may access and conduct works on Telstra's network (including its plant and assets). This includes performing modification or relocation works. This requirement is to ensure that Telstra can protect the integrity of its network, avoid disruption to services and ensure that the relocation meets Telstra's requirements.

DAMAGE TO TELSTRA'S NETWORK MUST BE REPORTED TO 132203 IMMEDIATELY.

You will be held responsible for all plant damage that occurs or any impacts to Telstra's network as a result of your construction activities. This includes interfering with plant, conducting unauthorised modification works and interfering with Telstra's assets in a way that prevents Telstra from accessing or using its assets in the future.

Telstra reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

EMERGENCY SITUATIONS - RECEIVING TELSTRA PLANS

Telstra's automated mapping system will provide a fast response for emergency situations. (Faster than an operator can provide manually). Automated responses are normally available 24/7.

To receive a fast automated response from Telstra your request must **-**

- Be a web request lodged at DBYD (**www.1100.com.au**). The request will be then forwarded directly to Telstra.
- contain your email address so you can receive the automated email response.
- be for the purposes of 'mechanical excavation' or other ground breaking DBYD activity. (requests with activity types conveyancing, planning & design or other non digging activities may not be responded to until the next business day).
- be for an area less than 350 metres in size to obtain a PDF map (over 350 metres will default to DWF due to size)
- be for an area less than 2500 metres in size to obtain a DWF map

NATURAL DISASTERS

Natural Disasters include (amongst other things) earthquakes, cyclones, floods and tsunamis.

In the case of such events, urgent requests for plans or information relating to the location of Telstra network can be made directly to Telstra Network Integrity Team Managers as follows:

NSW – John McInerney 0419 485 795

QLD – Glenn Swift 0419 660 147

VIC/TAS - David Povazan 0417 300 947

SA/NT - Mick Weaver 0419 828 703

WA - Angus Beresford-Peirse 0419 123 589

TELSTRA PLAN SERVICES **-** for all Telstra Dial Before You Dig related enquiries

email - **Telstra.Plans@team.telstra.com**

phone - **1800 653 935** (general enquiries, business hours only)

for Telstra DBYD plan information -	Shalin	07 3455 2997
	Glen	07 3455 1011
for advice on preventing damage -	Taylor	07 3455 3208
	Lachlan	07 3455 3132
	Adam	07 3455 2037
Accredited plant locator enquiries -	Mike	0477 377 036
(Including how to become an Accredited Plant Locator to locate Telstra network)		
Road closures and easements -	Marea	07 3455 0834
	Glen	07 3455 1011

Please note - to make an enquiry the plans must be current (within 60 days of issue). If your plans have expired you will need to submit a new request via DBYD.

CONCERNING TELSTRA PLANS:

Please note the following:

- For Telstra plans contact **Dial Before You Dig** (**www.1100.com.au**) at least 2 business days prior to digging. (Note - further lead time may be required for you to arrange for an Accredited Plant Locator from the provided list)
- Fast response can be provided by Telstra if an email address is supplied. (if posted, this may take up to one week or longer to receive plans)
- Telstra plans and information provided are **valid for 60 days** from the date of issue.
- Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.
- Telstra plans or other details are provided only for the use of the applicant, its servants, agents or Telstra-accredited plant locators. **The applicant may not give the plans or details to any parties other than these, and may not generate profit from commercialising the plans or details.**
- Please contact **Telstra Plan Services** (see above for details) immediately should you locate Telstra assets not indicated on these plans.
- Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.
- Please ensure Telstra plans and information provided remains on-site at all times throughout the inspection, location and construction phase of any works.

ESSENTIAL PRECAUTIONS AND APPROACH DISTANCES:

NOTE: If the following clearances cannot be maintained, please contact Telstra Plan Services for advice on how best to resolve this situation. (see above for contact details)

1. On receipt of plans and sketches and before commencing any excavation work or similar activities near Telstra's plant, **carefully locate this plant first** to avoid damage. **It is your responsibility as part of your "Duty of Care" to engage an Accredited Plant Locator** (the locator must have a current Telstra-issued accreditation card). Undertake prior manual exposure such as potholing when intending to excavate or work **closer** to Telstra plant than the following approach distances.

Where Telstra's plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 600mm must be maintained from where it is determined plant is located.

In non established or unformed reserves and terrain, this approach distance must be at least 1.5 metres.

In country/rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distances apply:

a) Parallel to major plant: 10 metres (for optic fibre and/or copper cable over 300 pairs)
b) Parallel to other plant: 5 metres

NOTE: Even manual pot-holing needs to be undertaken with extreme care, commonsense and employing techniques least likely to damage cables. For example, orientate shovel blades and trowels parallel to the cable rather than digging across the cable.

If construction work is parallel to Telstra plant, then careful hand digging or using non destructive water jet method (pot-holing) at least every 5m is required to establish the location of all plant before work commences.

2. Maintain the following minimum clearance between construction activity and **actual location** of Telstra Plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of **actual location.***
Vibrating Plate or Wacker Packer Compactor	*Not within 0.5m of actual location of Telstra ducts.* *300mm compact clearance cover before compactor can be used across Telstra ducts.*
Boring Equipment (in-line, horizontal and vertical)	*Not within 2.0m of **actual location**.* *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Telstra ducts (or plant) with less than 600mm cover.* *Constructor to check actual depth via hand digging.*
Mechanical Excavators, Farm ploughing and Tree Removal	*Not within 1.0m of **actual location.*** *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*

All Telstra pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work.

All Telstra conduit should have the following minimum depth of cover after the completion of your work:-

Footway 450mm

Roadway 450mm at drain invert and 600mm at road centre crown

For clearance distances relating to Telstra pillars, cabinets and RIMs/RCMs please contact Telstra Plan Services (see above for details).

FURTHER ASSISTANCE:

Assistance can be obtained by contacting Telstra Plan Services (see contact details above)

Where on-site location is provided, you are responsible for all hand digging or use non-destructive water jet method (pot-holing) to visually locate and expose Telstra plant. (For advice on damage prevention please contact Telstra Plan Services)

If plant location plans or visual location of Telstra plant by digging reveals that the location of Telstra plant is situated wholly or partly where you plan to work, then Telstra's Network Integrity Group must be contacted to discuss possible engineering solutions.
Please phone **1800 810 443** or email **F1102490@team.telstra.com**

NOTE:

If Telstra relocation or protection works are part of the agreed solution, then payment to Telstra for the cost of this work shall be the responsibility of the principal developer, constructor or person for whom the work is performed. The principal developer or constructor will be required to provide Telstra with the details of their proposed work showing how Telstra's plant is to be accommodated and these details must be approved by the Regional Network Integrity Manager prior to the commencement of site works.
Please phone **1800 810 443** or email **F1102490@team.telstra.com**

RURAL LANDOWNERS

Where Telstra owned cable crosses agricultural land, Telstra may provide on-site assistance with cable location. The Telstra Plan Services operator will provide assistance in determining eligibility.

Please note:

- The exact location, including depth of cables**,** must be verified by pot holing, which is not covered by this service.
- This service is only available to assist private rural land owners.
- This service normally covers one hour on-site only. Any time required in addition to Telstra funded time can be purchased directly from the Accredited Plant Locator.

For further information including terms and conditions, please contact Telstra Plan Services.

PRIVACY NOTE

Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website at www.telstra.com.au/privacy

DATA EXTRACTION FEES

In some instances a data extraction fee may be applicable for the supply of Telstra information. Typically a data extraction fee may apply to large projects or requests to be supplied in non standard formats. For further details refer to the section at the end of this document.

LEGEND

Exchange
(major cable present)

Footway access chamber
(can vary from 1-lid to 12-lid)

Roadway access chamber

or **Pillar/cabinet**
(above the ground / free standing)

Above ground complex equipment housing (eg RIM)
Please Note: This equipment is powered by 240V electricity.

PT **Public telephone**
Please Note: This equipment is powered by 240V electricity.

Direct buried cable

6 **Cable jointing pit**
(number indicating pit type)

6 **Buried cable jointing pit**
(number indicating pit type)

EJ **Elevated cable joint**
(above ground joint on buried cable)

Cable loop (direct buried)

Telstra Plant in shared utility trench

Aerial Cable
(above ground)

Aerial Cable
(attached to joint use pole e.g. power)

SMOF **Optical fibre cable direct buried**

or or or **Single to multiple round conduit**
Configurations 1, 2, 4, 9 respectively
P100 (Attached text denotes conduit type and size)

or or **Multiple square conduit**
Configurations 2, 4, 6 respectively
E85 (Attached text denotes conduit type and size)

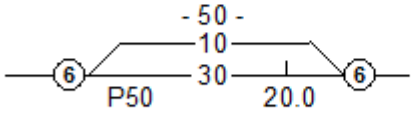
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / plastic, C - Concrete, GI - Galvanised iron, E - Earthenware.

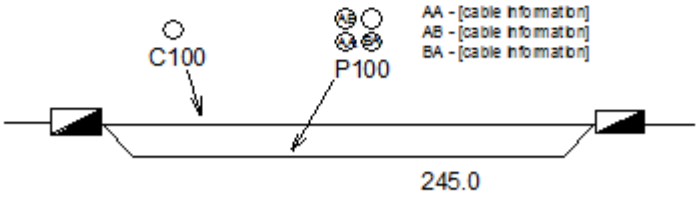
Conduit sizes *nominally* range from 20mm to 100mm.

P50	50mm PVC conduit
P100	100mm PVC conduit
A100	100mm asbestos cement conduit
E 85	85mm square earthenware conduit

Some examples of how to read Telstra plans:



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits, 20.0m apart, with a direct buried 30-pair cable along the same route.



Two separate conduit runs between two footway access chambers (manholes) 245m apart. A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along the same route.

WARNING: Telstra's plans show only the presence of cables and plant. They only show their position relative to road boundaries, property fences etc. at the time of installation and Telstra does not warrant or hold out that such plans are accurate thereafter due to changes that may occur over time.
DO NOT ASSUME DEPTH OR ALIGNMENT of cables or plant as these vary significantly.
The customer has a DUTY OF CARE when excavating near Telstra cables and plant. Before using machine excavators TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG (potholing) to identify its location.
Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

ELECTRONIC PLANS - PDF AND DWF MAPS

If you have received Telstra maps via email you will have received the maps as either a PDF file (for smaller areas) or DWF file (for larger area requests). If you are unable to launch any one of the softcopy files for viewing and printing, you may need to download and install one or more of the free viewing and printing products such as Adobe Acrobat Reader (for PDF files) or Autodesk Design Review (for DWF files) available from the internet.

PDF files

PDF is the default softcopy format for all requests for areas up to approx *350m in length. (*depends on geographic location of request). The PDF file is formatted to A3 portrait sheet however it can be printed on any size sheet including from A4 to AO, either as the full sheet or selected areas to suit needs and legibility. (to print a selected area zoom up and print 'current view') If there are multiple layers of Telstra network you may receive up to 2 sheets in the single PDF file attachment supplied. There are three types or layers of network normally recorded - local network, mains cables or a combined layer of local and mains (usually displayed in rural or semi rural areas). If mains cable network is present in addition to local cables (i.e. as separate layer in a particular area), the mains will be shown on a separate sheet. The mains cable information should be read in conjunction with the local cable information.

DWF files

This is the default softcopy format for all requests for areas that are over 350m in length. Maximum length for a DWF automated response is approx 2500m - depending on geographic location of request (manually-processed plans may provide larger coverage). The DWF files differ from PDF in that DWF are vector files made up of layers that can be turned on or off and are not formatted to a specific sheet size. This makes them ideal for larger areas and for transmitting over email etc.

How to view Telstra DWF files -

Telstra DWF files come with all layers turned on. You may need to turn individual layers on or off for viewing and printing clarity. Individual layer names are CC (main cable/conduit), DA (distribution or local area network) and sometimes a combined layer - CAC. Layer details can be viewed by either picking off the side menu or by selecting 'window' then 'layers' off the top menu bar. Use 'layers' to turn individual layers off or on. (double click or right click on layer icon.)

How to print Telstra DWF files -

DWF files can be printed on any size sheet. They can be printed in their entirety or by selected areas of interest. Some DWF coverage areas are large and are not suited to printing legibly on a single A4 sheet - you may need several prints if you only have an A4 printer. Alternatively, an A3, A1 or larger printer could be used. To print, zoom in or out and then, by changing the 'print range' settings, you can print what is displayed on your screen to suit your paper size. If you only have a small printer, e.g. A4, you may need to zoom until the text is legible on your screen for it to be legible on the print. (which is why you may need several prints). To print what is displayed on your screen the 'view' setting should be changed from 'full page' to 'current view'. The 'current sheet' setting should also be selected. You may need to print layers separately for clarity and legibility. (Details above on how to turn layers on or off)

How to change the background colour from white to black (when viewing) Telstra DWF files -

If using Autodesk Design Review the background colour can be changed by selecting 'Tools' then 'options' then 'sheet'. Tick the box 'override published paper colours' and select the colour required using the tab provided.

Telstra Automated Mapping System (TAMS)

Telstra provides an automated plan response for the majority of DBYD requests received.

Requestors must supply a current email address on their request to DBYD and must also be able to accept a standard format of PDF or DWF. An automated response can be provided much faster than the alternative of a mailed hardcopy, and can avoid unnecessary delays in waiting for plans to arrive. Being softcopy, it can easily be sent directly to a worksite and can be available 7 days a week. The automated system can be configured for individual requestors to receive either PDF/DWF (where small requests are PDF and larger requests are DWF) or, alternatively, all in DWF (both small and large requests). Please contact Plan Services for further details or to have your preferences updated. **Please note that all requests over *350m (approx.) in size can only be supplied in DWF format** and there are size limits on what can be provided. (* actual size depends on geographic location of requested area)

ACCREDITED PLANT LOCATORS (For your area)

*It is your responsibility as part of your 'Duty of Care' to engage an Accredited Plant Locator. All Accredited Plant Locators locating Telstra network must have a current identification card issued by Telstra. A list of Telstra Accredited Locators is provided with the Telstra Dial Before You Dig plans.

Telstra does not permit external parties (non-Telstra) to access or conduct work on our network. Only Telstra staff, Telstra contractors or locators that are correctly accredited are allowed to work on or enter our manholes, pits, ducts, cables etc. This is for safety as well as for legal reasons.

Please note it is a criminal offence under the *Criminal Code Act 1995* (Cth) to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by Telstra as a result of any such unauthorised works may be claimed against you.

For the assistance of customers an accredited Plant Locator can perform any of the following activities if requested to do so by the owner:

- review Telstra's plans to assess the approximate location of Telstra plant;
- advise owners of the approximate location of Telstra plant according to the plans;
- advise owners of the best method for locating Telstra plant;
- advise owners of the hazards of unqualified persons attempting to find the exact location of Telstra plant and working in the vicinity of Telstra plant without first locating its exact position; and
- perform trial hole explorations by hand digging (pot-holing) to expose Telstra plant with a high degree of skill, competence and efficiency and utilising all necessary safety equipment.

The attached list provides the names and contact details for Accredited Plant Locators who service your area and can provide you with assistance in locating Telstra plant on site. These organisations have been able to satisfy Telstra that they have a sound knowledge of telecommunications plant and its sensitivity to disturbance; appropriate equipment for locating telecommunications plant and competent personnel who are able to interpret telecommunications plans and sketches and understand safety issues relevant to working around telecommunications plant.

Please Note:

- Optic fibre cable locations must be performed by a locator with Telstra optic fibre cable location accreditation. (Not all copper accredited locators have optic fibre accreditation). The locators with additional optic fibre cable location accreditation are indicated by a 'yes' in the column headed 'Fibre' in the lists of locators that are published with the DBYD plans.
- An Accredited Plant Locator is NOT permitted to provide depth of communications plant unless it is physically exposed by hand digging.
- The details of any contract, agreement or retainer for site assistance to locate telecommunications plant shall be for you to decide and agree with the organisation engaged. Telstra is not a party to any contract entered into between you and an Accredited Plant Locator. The Accredited Plant Locators are able to provide guidance concerning the extent of site investigations required.
- Payment for the site assistance will be your responsibility and payment details should be agreed before the engagement is confirmed.
- Telstra does not accept any liability or responsibility for the performance of or advice given by an Accredited Plant Locator. Accreditation is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.
- You have the right to request the organisation you engage to show their Telstra issued ID card.
- Neither the Accredited Plant Locator nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Accredited Plant Locator or its employees.

Telstra offers free Cable Awareness Presentations & Advanced Cable Reading Presentations, if you believe you or your company would benefit from this offer please contact Network Integrity on 1800 810 443 or **F1102490@team.telstra.com**

*For details on how to become an Accredited Plant Locator to be able to locate Telstra network please contact Telstra Plan Services – Mike (0477 377 036) ***mugl@dominoapp.in.telstra.com.au***

DATA EXTRACTION FEES (when applicable)

for non-ground breaking activities -

***Planning and design, conveyancing, tendering, educational or research, other data gathering**

Note - The supply of any Telstra data for non ground breaking activities is at Telstra's discretion. Data supply may be refused on commercial, privacy, security or other reasons.

*Planning and design requests submitted by identified utilities intending works on their own assets **may** be exempt from the $55 (GST inc) extraction fee for Standard Telstra Responses for non ground breaking activities. This is at Telstra's discretion and conditions may apply. Data extraction fees for all non standard responses however will still apply. Eg for large projects or non standard formats.

The supply of any data for non ground breaking activities is not subject to a 48hr response time; however Telstra will endeavour to respond within 48hrs for all standard responses.

==========

Standard Telstra response for non ground breaking activities: $55 (GST inc.)

Criteria: each request only requires a single delivery from Telstra (as in 1 request 1 Delivery).
A single delivery is either –

- **1 x email with 1 x PDF map file** containing one or two A3 map pages (depending on network). *Covers areas up to approx. 500m in size.*

  OR

- **1 x email with 1 x DWF map file.** *Covers areas up to approx. 3km in size.*

  OR

- **1 x *posted delivery** *(*only if email unavailable or at Telstra's discretion).* Posted format is either –
  - Posted softcopy of standard response (on disk)
    or
  - Posted printed hardcopy (maximum of 2 x A3 sheets only).

==========

Non-Standard Response – for non ground breaking activities (fees apply)

Data Use Agreement (required for DXF format) **$110** (GST inc)

Projects - If a response takes more than 30mins to extract data in any format, an hourly rate will apply **($110** per hour GST inc).

- Projects that take 1 day or longer will be quoted individually.
- All data will be provided in softcopy only - not printed.

Note - Multiple part requests through DBYD for one project will be amalgamated and considered a single project for data extraction charging purposes. Posted responses cannot be delivered within 48hrs, allow several days for delivery. Postage is by Australia Post standard delivery. Express delivery at additional cost. All prices and specifications are subject to change.

DATA EXTRACTION FEES (when applicable)

for ground breaking activities -

***Manual or mechanical excavation, horizontal boring, vertical boring, blasting**

==========

For a Standard Telstra Response for ground breaking activities - cost to requestor **- $nil**

Standard Response Criteria -
Each request only requires a single delivery from Telstra (1 request 1 delivery).

A single delivery is defined as either -

- **1 x Email with 1 x PDF map file** containing one or two A3 map pages (depending on network can cover up to approx 350m).

  OR

- **1 x Email with 1 x DWF map file**. Covers up to approx 3km.

  OR

- **1 x *Posted delivery** for customers requesting a response for their principal place of residence only, (and only when email delivery is unavailable or at Telstra's discretion).

  Either -
  - Posted softcopy on disk (standard response only)
  - Posted printed hardcopy (A3 sheets only- at Telstra's discretion)

==========

For a Non-Standard Telstra Response for ground breaking activities (fees apply)

An extraction fee is incurred if the response exceeds a standard response i.e. -

- Use of data requires a data use agreement (for example DXF format)
- If an individual job or project requires more than a single delivery (as defined above)
- Specific printing and/or posting of requests that are not for the principle place of residence
- Any other response other than a Standard Telstra Response for ground breaking activities

Data extraction costs for ground breaking activities -

- Posted softcopy on disk of standard response when not principle place of residence- **$22** (GST inc.)
- Posted hardcopy of standard response i.e. when not principle place of residence – max of 2 x A3 sheets (at legible scale) - **$22 (**GST Inc.) Note - large areas will not be printed and posted.
- Requires Data Use Agreement – i.e. requirement for DXF files - **$110** (GST inc)
- Non standard response (i.e. over 30 mins extraction time for softcopy) will be at an hourly rate (**$110 per hour** GST inc).
- Projects that take 1 day or longer will be quoted individually.

Note - Multiple part requests through DBYD for one project will be amalgamated and considered a single project for data extraction charging purposes. Printing/posting fee exemptions may be provided at Telstra's discretion. Postage is by Australia Post standard delivery. All posted plans will normally be extracted within 48 hrs; time in transit through post is additional and may take several days Express delivery at additional cost. All prices and specifications are subject to change. Data extraction fees are based on various criteria including the principal excavation activity selected by the customer on the DBYD website. Telstra reserves the right to vary its fees in circumstances where the principal excavation activity is varied or misrepresented by the customer.

ATTACHMENT E

ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)
ABN 82 147 943 842

P.O. Box 149
Yagoona NSW 2199

Telephone: +612 9644 1679
Mobile: 0412 169 809
Facsimile: +612 8076 3026
Email: alsearch@optusnet.com.au

10th January, 2015

GEO_LOGIX PTY LIMITED
Building Q2, Level 3,
Daydream Street,
WARRIEWOOD NSW 2102

Attention: Jenna Seymour

RE: **Lot 4, Bridgeman Road,**
Singleton
PO 446

Current Search

Folio Identifier 4/1196266 (title attached)
DP 1196266 (plan attached)
Dated 10th January, 2015
Registered Proprietor:
SINGLETON SHIRE COUNCIL

Title Tree
Lot 4 DP 1196266

Folio Identifier 4/1196266

Folio Identifier 31/1140924

Folio Identifier 61/1097141

Folio Identifier 2/10191619

Folio Identifier 2/1053177

(a)	(b)
Folio Identifier 1/617737	Auto Consol 14154-84
CTVol 14572 Folio 183	CTVol 14154 Folio 84
RPA 55776	Crown Road
Conveyance Book 3441 No 151	****
Conveyance Book 2703 No 791	
Conveyance Book 1084 No 973	
****	

Summary of proprietor(s)
Lot 4 DP 1196266

Year	Proprietor
	(Lot 4 DP 1196266)
2014 – todate	Singleton Shire Council
	(Lot 31 DP 1140924)
2009 – 2014	Singleton Shire Council
	(Lot 61 DP 1097141)
2006 – 2009	Singleton Shire Council
	(Lot 2 DP 1091619)
2006 – 2006	Singleton Shire Council
	(Lot 2 DP 1053177)
2003 – 2006	Singleton Shire Council

See Notes (a) & (b)

Note (a)

	(Lot 1 DP 617737)
1988 – 2003	Singleton Shire Council
	(Lot 1 DP 617737 – CTVol 14572 Fol 183)
1981 – 1988	Singleton Shire Council
	(Portions 7, 7A & 8 of the Dunolly Estate subdivision of Portion 217 Parish Darlington – Conv Bk 3441 No 151)
1981 – 1981	Singleton Shire Council
	(Portion 7 the Dunolly Estate subdivision of Portion 217 Parish Darlington – Area 68 Acres - Conv Bk 2703 No 791)
1964 – 1981	Arnold John William Lawrence, dairy farmer Myra Joyce Lawrence, widow
1957 – 1964	Harold Frederick Morphett, farmer & grazier / executor Donald Victor Morphett, farmer & grazier / executor Sydney Baker, farmer & grazier / executor William Henry Morphett, estate
	(Portion 7 the Dunolly Estate subdivision of Portion 217 Parish Darlington – Area 68 Acres - Conv Bk 1084 No 973)
1916 – 1957	William Henry Morphett, farmer

****

Note (b)

	(Lots 263 & 264 DP 39803 – A/C 14154-84)
1995 – 2003	Singleton Shire Council
1992 – 1995	Myra Joyce Lawrence
	(Lots 263 & 264 DP 39803 – CTVol 14154 Fol 84))
1987 – 1992	Myra Joyce Lawrence
1980 – 1987	Andrew John Lawrence, dairy farmer Myra Joyce Lawrence
	(Crown Road – Parish Darlington)
Prior – 1980	Crown Road

****

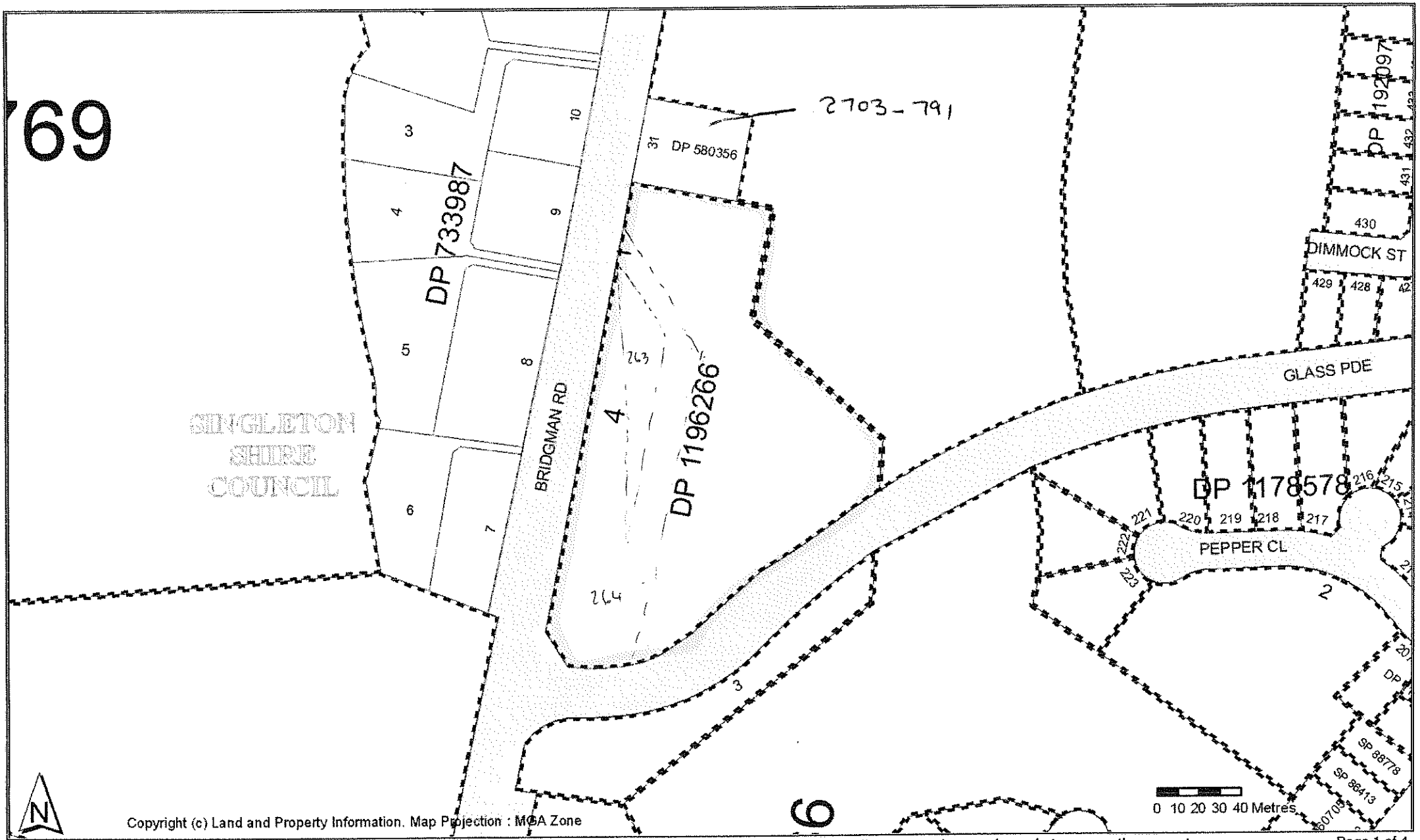
Land & Property Information

Cadastral Records Enquiry Report

Ref : BOX 97 - SINGLETON

Requested Parcel : Lot 4 DP 1196266 **Identified Parcel :** Lot 4 DP 1196266

Locality : HUNTERVIEW **LGA :** SINGLETON **Parish :** DARLINGTON **County :** DURHAM



Report Generated 2:05:49 PM, 5 January, 2015

This information is provided as a searching aid only. While every endeavour is made to ensure the current cadastral pattern is accurately reflected, the Registrar General cannot guarantee the information provided. For all ACTIVITY PRIOR to SEPT 2002 you must refer to the RGs Charting and Reference Maps.

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 4/1196266

SEARCH DATE	TIME	EDITION NO	DATE
10/1/2015	9:35 AM	1	27/8/2014

LAND

LOT 4 IN DEPOSITED PLAN 1196266
AT HUNTERVIEW
LOCAL GOVERNMENT AREA SINGLETON
PARISH OF DARLINGTON COUNTY OF DURHAM
TITLE DIAGRAM DP1196266

FIRST SCHEDULE

SINGLETON SHIRE COUNCIL

SECOND SCHEDULE (3 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S) WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM
2 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM - SEE CROWN GRANT
3 EXCEPTING LAND BELOW A DEPTH FROM THE SURFACE OF 20 METRES BY THE CROWN GRANT WITHIN THE PART SHOWN SO INDICATED IN THE TITLE DIAGRAM

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
10/1/2015 9:46AM

FOLIO: AUTO CONSOL 14154-84

Recorded	Number	Type of Instrument	C.T. Issue
7/1/1992		CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 14154-84	
		PARCELS IN CONSOL ARE: 263-264/39803.	
25/7/1995	O407403	TRANSFER	EDITION 1
27/5/2003	DP1053177	DEPOSITED PLAN	FOLIO CANCELLED RESIDUE REMAINS

*** END OF SEARCH ***

CROWN GRANT

No. 64555

Vol. 14136 Fol. 103
Registered 10-6-1980

Registrar General

(Page 1) Vol. 14136 Fol. 103

We, Elizabeth the Second, by the Grace of God Queen of Australia and Her other Realms and Territories, Head of the Commonwealth, do hereby grant to the person described in the First Schedule an Estate in Fee Simple in the land within described, subject nevertheless to such reservations, conditions and other provisions as are shown in the Second Schedule. In testimony whereof We have caused this Our Grant to be sealed with the seal of Our said State

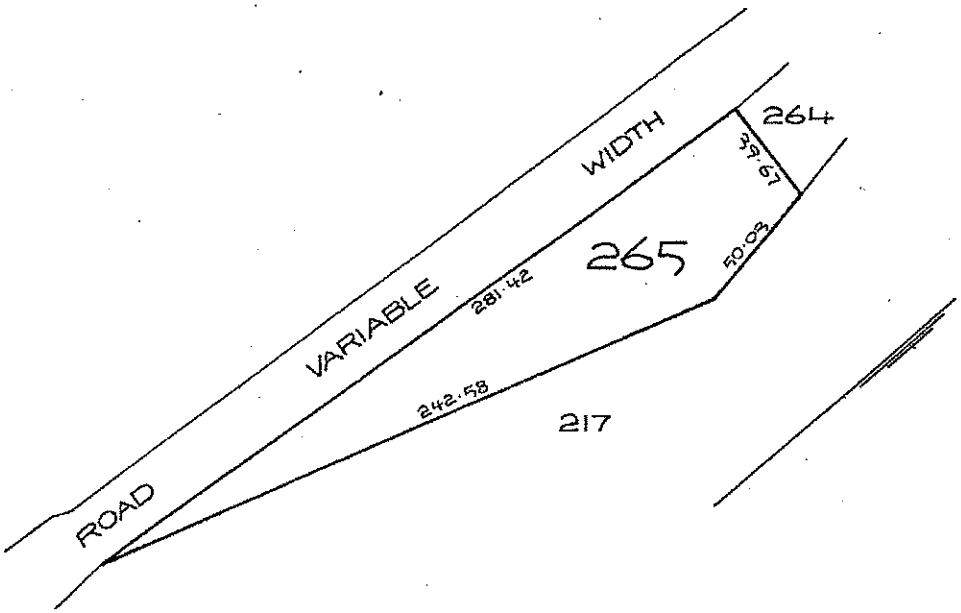
Witness Our Governor of Our State of New South Wales and its Dependencies in the Commonwealth of Australia at Sydney in Our said State, this second day of June in the twenty ninth year of Our Reign and in the year of Our Lord one thousand nine hundred and eighty.

Governor

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



AREA: 8263 m²

REDUCTION RATIO 1:2000

LAND REFERRED TO

Lot 265 in Deposited Plan 39803 in the Shire of Singleton Parish of Darlington and County of Durham. EXCEPTING THEREOUT the land below a depth of 20 metres from the surface.

FIRST SCHEDULE

~~COLIN PERCIVAL NOWLAN of 54 Fletcher Street Wallsend and ANNA DRUSCILLA NOWLAN of Bridgman Road Singleton as Trustees of the Estate of the Late Percy Patrick Nowlan.~~

SECOND SCHEDULE

1. We do hereby reserve and except unto Us Our Heirs and Successors all minerals which the land hereby granted contains with full power and authority for Us Our Heirs and Successors and such person or persons as shall from time to time be authorised by Us or Them to enter upon the land hereby granted and to search for mine dig and remove the said minerals and also all such parts and so much of the land hereby granted as may hereafter be required for public ways in over and through the same to be set out by Our Governor for the time being of Our said State or some person by him authorised in that respect with full power for Us Our Heirs and Successors and for Our Governor as aforesaid by such person or persons as shall be by Us Them or him authorised in that behalf to make and conduct all such public ways And the right of full and free ingress egress and regress into out of and upon the land hereby granted for the several purposes aforesaid or any of them Provided Further and it is expressly declared that mining operations may have been and may be carried on upon and in the land below the land hereby granted and the lands adjoining the land hereby granted and the land below the same and metals and minerals may have been and may be removed therefrom and that these presents are made upon and subject to the condition that neither the Grantee or Grantees nor his her their or its sequels in title shall be entitled to make or prosecute any claim for damages or take any proceedings either by way of injunction or otherwise against Us Our Heirs and Successors or the Government of Our said State or any lessee or lessees under any Mining Act or Acts of Our said State or his or their executors administrators or assigns for or in respect of any damage or loss occasioned by the letting down subsidence or lateral movement of the land hereby granted or otherwise howsoever by reason of the following acts and matters that is to say by reason of Us Our Heirs or Successors or the Government of Our said State or any person on Our Their or its behalf or any lessee or lessees as aforesaid or his or their executors administrators or assigns having worked or now or hereafter working any mines or having carried on or now or hereafter carrying on mining operations or having searched for worked won or removed or now or hereafter searching for working winning or removing any metals or minerals under in or from the land below the land hereby granted or on in under or from any other lands situated laterally to the land hereby granted and the land below the same and whether on or below the surface of such other lands Provided Lastly and we do hereby expressly reserve unto Us Our Heirs and Successors the liberty and authority by reason of the acts and matters aforesaid or in the course thereof for Us Our Heirs and Successors and the Government of Our said State and any person on Our Their or its behalf and any lessee or lessees as aforesaid and his or their executors administrators and assigns to from time to time let down without payment of any compensation whatsoever any part of the land hereby granted and/or of the surface thereof.

W550654 ND R
5T

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	Signature of Registrar General
The Council of the Shire of Singleton by Notice of Death W550654 and Transfer W550655 Registered 8-10-1986				

SEE AUTO FOLIO

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	PARTICULARS	REGISTERED	Signature of Registrar General	CANCELLATION	

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

Vol. 14136 Fol. 103

NEW SOUTH WALES

CERTIFICATE OF TITLE

REAL PROPERTY ACT, 1900

14572183

Appln No. 55776

Vol. 14572 Fol. 183

EDITION ISSUED

29 10 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.

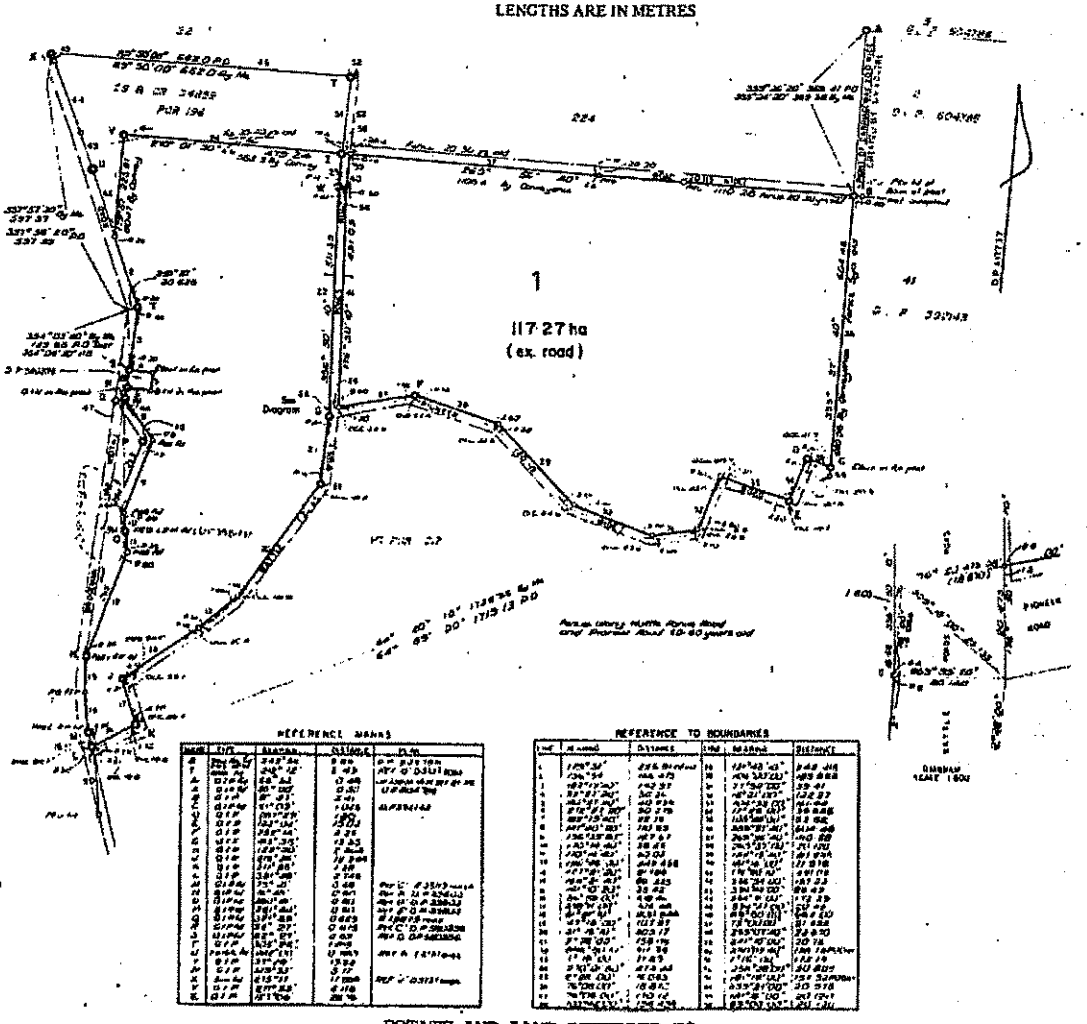
CANCELLED

Registrar General.

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 617737 at Singleton in the Shire of Singleton Parish of Darlington County of Durham being part of Portion 217 granted to James Taylor McDougall on 23-9-1839.

FIRST SCHEDULE

SINGLETON SHIRE COUNCIL.

SECOND SCHEDULE

GR4 1. Reservations and conditions, if any, contained in the Crown Grant above referred to.

~~2. Book 3441 No. 152 Mortgage to Arnold John William Lawrence and Myra Joyce Lawrence.~~

W180343

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

Vol. 14572 Fol. 183

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	Registrar General
CANCELLED SEE AUTO FOLIO	

SECOND SCHEDULE (continued)

PARTICULARS	Registrar General	CANCELLATION

NOTATIONS AND UNREGISTERED DEALINGS

W180343DMP

NEW SOUTH WALES

CROWN GRANT

14154084

No. 60602

$1.00

Vol. 14154 Fol. 84
Registered 1-7-1980

Registrar General

CANCELLED

We, Elizabeth the Second, by the Grace of God Queen of Australia and Her other Realms and Territories, Head of the Commonwealth, do hereby grant to the person described in the First Schedule an Estate in Fee Simple in the land within described, subject nevertheless to such reservations, conditions and other provisions as are shown in the Second Schedule. In testimony whereof We have caused this Our Grant to be sealed with the seal of Our said State

SEE AUTO FOLIO

Witness Our Governor of Our State of New South Wales and its Dependencies in the Commonwealth of Australia at Sydney in Our said State, this twenty third day of June in the twenty ninth year of Our Reign and in the year of Our Lord one thousand nine hundred and eighty.

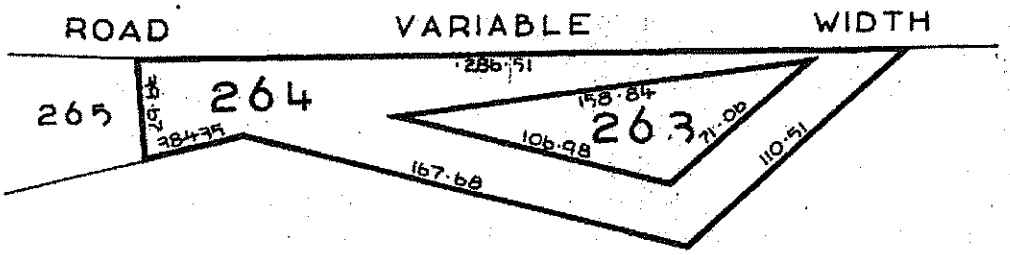
A. R. Cutler

Governor

(Page 1) Vol. 14154 Fol. 84

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



POR. 217

263 - (3110 m²)
264 - (9727 m²)

TOTAL AREA: 1·284 Ha.

REDUCTION RATIO 1:2000

LAND REFERRED TO

Lots 263 and 264 in Deposited Plan 39803 in the Shire of Singleton Parish of Darlington and County of Durham. EXCEPTING THEREOUT the land below a depth of 20 metres from the surface.

FIRST SCHEDULE

~~ANDREW JOHN LAWRENCE of Singleton and MYRA JOYCE LAWRENCE his wife as Tenants in Common in equal shares.~~

SECOND SCHEDULE

1. We do hereby reserve and except unto Us Our Heirs and Successors all minerals which the land hereby granted contains with full power and authority for Us Our Heirs and Successors and such person or persons as shall from time to time be authorised by Us or Them to enter upon the land hereby granted and to search for mine dig and remove the said minerals and also all such parts and so much of the land hereby granted as may hereafter be required for public ways in over and through the same to be set out by Our Governor for the time being of Our said State or some person by him authorised in that respect with full power for Us Our Heirs and Successors and for Our Governor as aforesaid by such person or persons as shall be by Us Them or him authorised in that behalf to make and conduct all such public ways And the right of full and free ingress egress and regress into out of and upon the land hereby granted for the several purposes aforesaid or any of them Provided Further and it is expressly declared that mining operations may have been and may be carried on upon and in the land below the land hereby granted and the lands adjoining the land hereby granted and the land below the same and metals and minerals may have been and may be removed therefrom and that these presents are made upon and subject to the condition that neither the Grantee or Grantees nor his her their or its sequels in title shall be entitled to make or prosecute any claim for damages or take any proceedings either by way of injunction or otherwise against Us Our Heirs and Successors or the Government of Our said State or any lessee or lessees under any Mining Act or Acts of Our said State or his or their executors administrators or assigns for or in respect of any damage or loss occasioned by the letting down subsidence or lateral movement of the land hereby granted or otherwise howsoever by reason of the following acts and matters that is to say by reason of Us Our Heirs or Successors or the Government of Our said State or any person on Our Their or its behalf or any lessee or lessees as aforesaid or his or their executors administrators or assigns having worked or now or hereafter working any mines or having carried on or now or hereafter carrying on mining operations or having searched for worked won or removed or now or hereafter searching for working winning or removing any metals or minerals under in or from the land below the land hereby granted or on in under or from any other lands situated laterally to the land hereby granted and the land below the same and whether on or below the surface of such other lands Provided Lastly and we do hereby expressly reserve unto Us Our Heirs and Successors the liberty and authority by reason of the acts and matters aforesaid or in the course thereof for Us Our Heirs and Successors and the Government of Our said State and any person on Our Their or its behalf and any lessee or lessees as aforesaid and his or their executors administrators and assigns to from time to time let down without payment of any compensation whatsoever any part of the land hereby granted and/or of the surface thereof.

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	Signature of Registrar General
Myra Joyce Lawrence by Transmission T361269 Registered 23-5-1989 ✓				

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	PARTICULARS	REGISTERED	Signature of Registrar General	CANCELLATION	
		CANCELLED SEE AUTO FOLIO				

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

Vol. 14154 Fol. 84

(AA) - EASEMENT FOR UNDERGROUND ELECTRICITY CABLES AND ACCESS THERETO 3 WIDE (DP1053177)

(BB) - LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN CROWN GRANT. EXCLUDES LAND BELOW A DEPTH OF 20 METRES

(CC) - RESERVATIONS AND CONDITIONS - SEE CROWN GRANT

(DD) - EASEMENT FOR WATER SUPPLY 7 WIDE OVER EXISTING PIPE (DP1089313)

41
DP 592143

(X) POSITIVE COVENANT (DP1160705)
(Y) BENEFITED BY
- EASEMENT TO DRAIN SEWAGE VAR. WIDTH (DP1169307)
- EASEMENT TO DRAIN SEWAGE 2.5 WIDE (DP1169307)
- EASEMENT TO DRAIN WATER 2 WIDE (DP1140924)
- EASEMENT FOR SEWAGE 2.5 WIDE (DP1160705)

(Z) BENEFITED BY
- EASEMENT TO DRAIN WATER 2 WIDE (DP1190910)

SCHEDULE OF PERMANENT MARKS

CLAUSE 35(1)(b) AND CLAUSE 61(2) OF THE SURVEYING & SPATIAL INFORMATION REGULATION 2012.

MARK	M.G.A. CO-ORDINATES EASTING	M.G.A. CO-ORDINATES NORTHING	CLASS	ORDER	METHOD	ORIGIN
PM 79001	328 886.455	6 398 493.180	B	2		SCIMS
PM 80229	327 981.613	6 398 067.697	A	1		SCIMS
PM 80230	328 120.086	6 398 577.346	A	1		SCIMS
SSM 135696	328 256.414	6 398 032.595	C	4		SCIMS
SSM 136436	328 722.322	6 398 508.875	C	4		SCIMS
SSM 136437	329 075.264	6 398 266.869	C	4		SCIMS
SSM 136456	329 525.500	6 398 216.806	C	4		SCIMS
SSM 136459	329 097.415	6 398 248.982	C	4		SCIMS
SSM 136460	329 228.240	6 398 188.435	C	4		SCIMS
SSM 144000	328 836.111	6 398 474.811	C	4		SCIMS
SSM 144008	328 939.706	6 398 425.800	C	4		SCIMS
SSM 144259	328 135.336	6 397 961.527	C	4		SCIMS
SSM 144261	328 543.526	6 398 332.617	C	3		SCIMS
SSM 160807	328 673.182	6 398 809.066	U	U	TRAVERSE	DP1184988
SSM 172554	328 787.438	6 398 595.437	U	U	TRAVERSE	DP1169307
SSM 172556	328 070.343	6 398 318.372	U	U	TRAVERSE	
SSM 172557	328 459.451	6 398 389.667	U	U	TRAVERSE	DP1178578
SSM 172559	328 558.434	6 398 482.022	U	U	TRAVERSE	
SSM 172562	328 810.900	6 398 703.083	U	U	TRAVERSE	DP1184988
SSM 172563	328 811.804	6 398 782.210	U	U	TRAVERSE	DP1184988
SSM 177407	328 581.212	6 398 804.320	U	U	TRAVERSE	DP1190910
SSM 177408	328 530.191	6 398 820.616	U	U	TRAVERSE	DP1190910
SSM 177409	328 509.205	6 398 747.977	U	U	TRAVERSE	DP1190910
SSM 177410	328 513.960	6 398 673.258	U	U	TRAVERSE	DP1192097
SSM 177411	328 490.784	6 398 545.252	U	U	TRAVERSE	DP1192097

COMBINED SEA LEVEL SCALE FACTOR = 0.999947 — ZONE 56

SOURCE: M.G.A. CO-ORDINATES ADOPTED FROM DEPT. OF LANDS NSW ON 24/10/2013

PERMANENT MARK TRAVERSE SCHEDULE

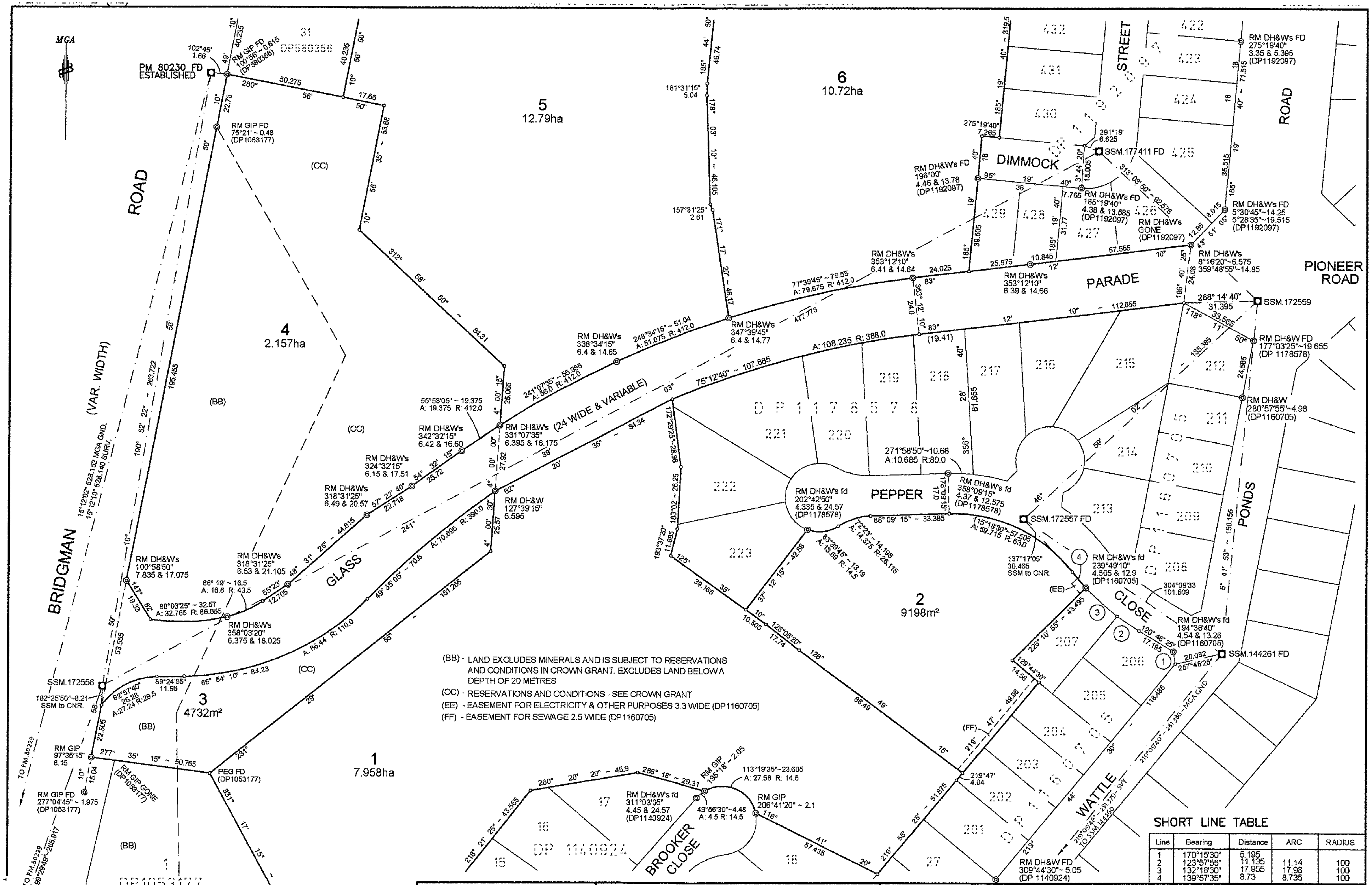
MARK	MARK	BEARING	DISTANCE	
SSM 144259	SSM 135696	59°35'22"	140.401	SURVEY
		59°35'20"	140.401	MGA GND
SSM 135696	SSM 144260	53°12'08"	136.662	SURVEY
		53°12'06"	136.660	MGA GND
SSM 144260	SSM 144261	39°09'46"	281.379	SURVEY
		39°09'40"	281.386	MGA GND
SSM 144261	SSM 172559	5°41'35"	150.155	SURVEY
SSM 144261	SSM 172557	304°09'33"	101.609	SURVEY
SSM 172557	SSM 172559	46°59'02"	135.385	SURVEY
SSM 172559	SSM 177411	313°03'50"	92.575	SURVEY
SSM 177411	SSM 172556	241°39'03"	477.775	SURVEY
SSM 172556	PM 80230	10°52'22"	263.722	SURVEY
PM 80230	PM 80229	195°12'10"	528.140	SURVEY
		195°12'02"	528.152	MGA GND
PM 80229	SSM 172556	19°29'49"	265.917	SURVEY
PM 80229	SSM 144259	124°37'58"	186.842	SURVEY
		124°37'52"	186.833	MGA GND
SSM 172559	SSM 136436	80°41'27"	166.087	SURVEY
SSM 136436	SSM 172554	36°58'13"	108.307	SURVEY
SSM 172554	SSM 172562	12°17'45"	110.179	SURVEY
SSM 172562	SSM 172563	0°39'15"	79.136	SURVEY
SSM 172563	SSM 160807	280°57'53"	92.097	SURVEY
SSM 160807	SSM 177407	267°02'45"	92.097	SURVEY

PERMANENT MARK TRAVERSE SCHEDULE

'X'-'Y'

MARK	MARK	BEARING	DISTANCE	
SSM 177407	SSM 177408	287°42'48"	53.563	SURVEY
SSM 177408	SSM 177409	196°06'53"	75.613	SURVEY
SSM 177409	SSM 177410	176°21'33"	74.875	SURVEY
SSM 177410	SSM 177411	190°15'45"	130.094	SURVEY
SSM 177411	SSM 172559	133°03'50"	92.574	SURVEY
SSM 136436	SSM 144000	106°40'00"	118.784	SURVEY
		106°39'56"	118.784	MGA GND
SSM 144000	PM 79001	69°57'10"	53.595	SURVEY
		69°57'16"	53.593	MGA GND
PM 79001	SSM 144008	141°40'45"	85.888	SURVEY
		141°40'49"	85.886	MGA GND
SSM 144008	SSM 136437	139°32'15"	208.908	SURVEY
		139°32'17"	208.901	MGA GND
SSM 136437	SSM 136459	128°55'15"	28.472	SURVEY
		128°55'16"	28.473	MGA GND
SSM 136459	SSM 136460	114°50'06"	144.163	SURVEY
		114°50'06"	144.165	MGA GND
SSM 136460	SSM 136456	84°32'53"	298.629	SURVEY
		84°32'53"	298.627	MGA GND

Surveyor: Brian Leslie James Blight Date of Survey: 21/01/2013 Surveyor's Ref: 3056-P-DP	PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097	LGA: SINGLETON Locality: HUNTERVIEW Subdivision No: 16/2014 Lengths are in metres. Reduction Ratio 1: 4000	Registered: 27.8.2014	DP1196266



(BB) - LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN CROWN GRANT. EXCLUDES LAND BELOW A DEPTH OF 20 METRES

(CC) - RESERVATIONS AND CONDITIONS - SEE CROWN GRANT

(EE) - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 3.3 WIDE (DP1160705)

(FF) - EASEMENT FOR SEWAGE 2.5 WIDE (DP1160705)

SHORT LINE TABLE

Line	Bearing	Distance	ARC	RADIUS
1	170°15'30"	5.195		
2	123°57'55"	11.135	11.14	100
3	132°18'30"	17.955	17.98	100
4	139°57'35"	8.73	8.735	100

Surveyor: Brian Leslie James Blight
Date of Survey: 21/01/2013
Surveyor's Ref: 3056-P-DP

PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097

LGA: SINGLETON
Locality: HUNTERVIEW
Subdivision No: 16/2014
Lengths are in metres. Reduction Ratio 1: 1000

Registered:
27.8.2014

DP1196266

SEE SHEET 4

7
17.82ha

WATTLE

PONDS ROAD

WRIGHT CLOSE

LAMBKIN ST.

HARPUR ST.

BROOMFIELD ST.

MOXHAM

GEE ST.

DIMMOCK STREET

SATTLER

PEPPER CLOSE

BROOKER CL.

BRIDGMAN ROAD

SSM.136436 FD

SSM.160807 FD

SSM. 177407 FD

SSM. 177408 FD

SSM. 177409 FD

SSM. 177410 FD

SSM. 177411 FD

SSM. 172559

SSM. 172556

SSM 144261 FD ESTABLISHED

SSM 144260 FD ESTABLISHED

SSM.135696 FD ESTABLISHED

SSM.144259 FD NOT ESTABLISHED

PM 80230 FD ESTABLISHED

PM 80229 FD ESTABLISHED

SEE SHEET 2

SEE DIAGRAMS 1&3

SEE DIAGRAM 2

SEE DIAGRAM 3

6
10.72ha

5
12.79ha

4
2.157ha (CC)

3
4732m²

2
9198m²

1
7.958ha

DP1184988

DP1159367

DP1190910

DP1192097

DP1178578

DP1160705

DP1140924

DP1053177

DP580356

DP752455

(AA) - EASEMENT FOR UNDERGROUND ELECTRICITY CABLES AND ACCESS THERETO 3 WIDE (DP1053177)

(BB) - LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN CROWN GRANT. EXCLUDES LAND BELOW A DEPTH OF 20 METRES

(CC) - RESERVATIONS AND CONDITIONS - SEE CROWN GRANT

(DD) - EASEMENT FOR WATER SUPPLY 7 WIDE OVER EXISTING PIPE (DP1089313)

SHORT LINE TABLE

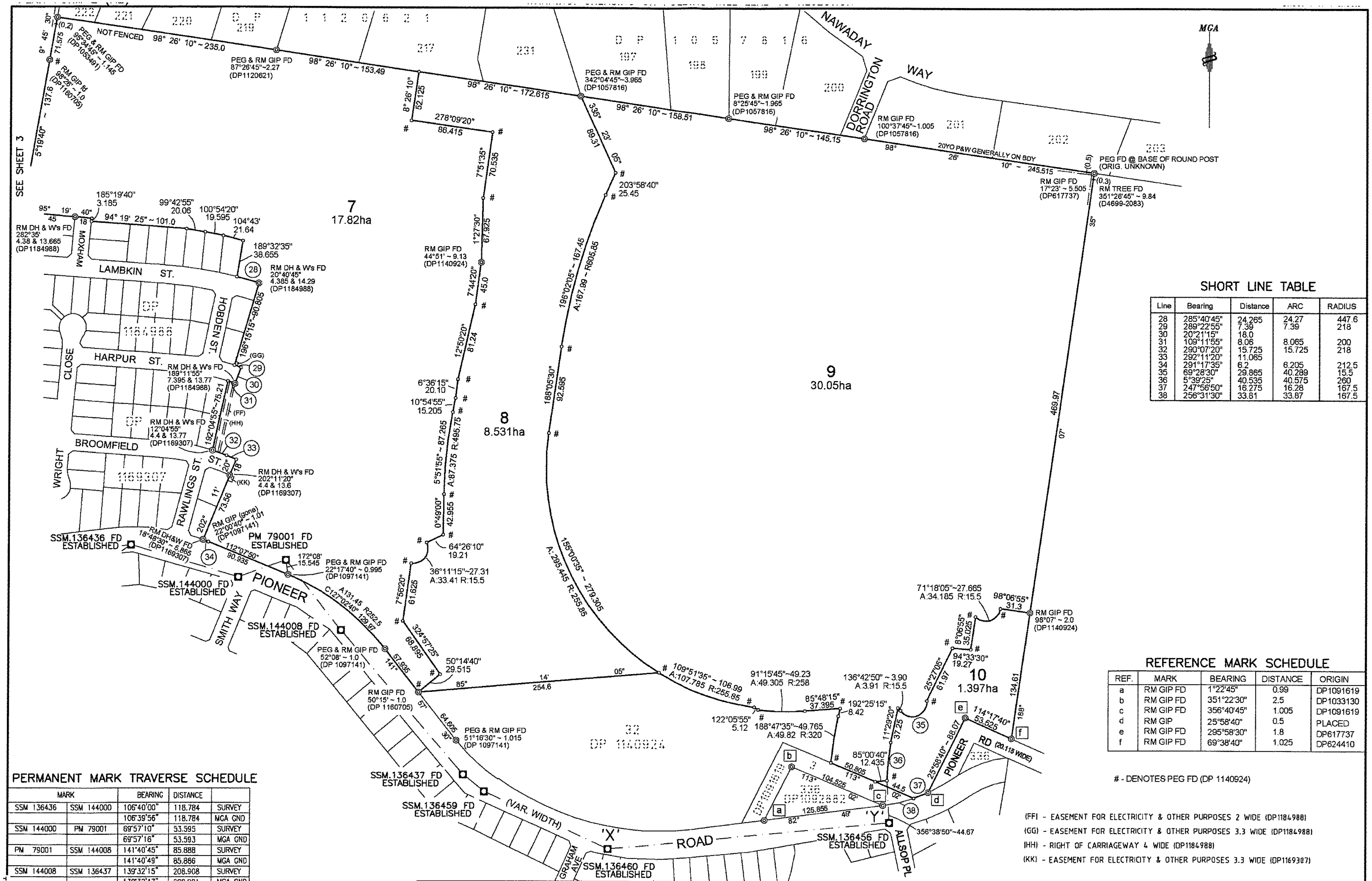
Line	Bearing	Distance	ARC	RADIUS
5	62°20'35"	84.34		
6	172°29'25"	28.96		
7	183°02'	26.25		
8	193°37'20"	11.685		
9	125°35'10"	10.505		
10	128°06'20"	17.74		
11	113°19'35"	23.605	27.58	14.5
12	356°27'55"	5.835		
13	219°44'30"	22.225		
14	126°11'50"	44.58		
15	145°45'	38.475		
16	325°44'30"	30.0		
17	329°30'15"	14.35		
18	281°31'55"	14.35		
19	149°30'15"	23.865		
20	239°50'45"	8.195		
21	239°50'30"	32.655		
22	241°07'35"	55.955	56.0	412
23	248°34'15"	51.04	51.075	412
24	77°39'45"	79.55	79.675	412
25	83°12'10"	24.025		
26	186°40'25"	24.68		
27	75°12'40"	107.885	108.235	388

DIAGRAM 1
N.T.S

DIAGRAM 2
1:1000

DIAGRAM 3
N.T.S

Surveyor: Brian Leslie James Blight Date of Survey: 21/01/2013 Surveyor's Ref: 3056-P-DP	PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097	LGA: SINGLETON Locality: HUNTERVIEW Subdivision No: 16/2014 Lengths are in metres. Reduction Ratio 1: 2500	Registered: 27.8.2014	DP1196266



SHORT LINE TABLE

Line	Bearing	Distance	ARC	RADIUS
28	285°40'45"	24.265	24.27	447.6
29	289°22'55"	7.39	7.39	218
30	20°21'15"	18.0		
31	109°11'55"	8.06	8.065	200
32	290°07'20"	15.725	15.725	218
33	292°11'20"	11.065		
34	291°17'35"	6.2	6.205	212.5
35	69°28'30"	29.865	40.289	15.5
36	5°39'25"	40.535	40.575	260
37	247°56'50"	16.275	16.28	167.5
38	256°31'30"	33.81	33.87	167.5

REFERENCE MARK SCHEDULE

REF.	MARK	BEARING	DISTANCE	ORIGIN
a	RM GIP FD	1°22'45"	0.99	DP1091619
b	RM GIP FD	351°22'30"	2.5	DP1033130
c	RM GIP FD	356°40'45"	1.005	DP1091619
d	RM GIP	25°58'40"	0.5	PLACED
e	RM GIP FD	295°58'30"	1.8	DP617737
f	RM GIP FD	69°38'40"	1.025	DP624410

- DENOTES PEG FD (DP 1140924)

(FF) - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 2 WIDE (DP1184988)

(GG) - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 3.3 WIDE (DP1184988)

(HH) - RIGHT OF CARRIAGEWAY 4 WIDE (DP1184988)

(KK) - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 3.3 WIDE (DP1169307)

PERMANENT MARK TRAVERSE SCHEDULE

MARK		BEARING	DISTANCE	
SSM 136436	SSM 144000	106°40'00"	118.784	SURVEY
		106°39'56"	118.784	MGA GND
SSM 144000	PM 79001	69°57'10"	53.595	SURVEY
		69°57'16"	53.593	MGA GND
PM 79001	SSM 144008	141°40'45"	85.888	SURVEY
		141°40'49"	85.886	MGA GND
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		128°55'16"	28.473	MGA GND
SSM 136459	SSM 136460	114°50'06"	144.163	SURVEY
		114°50'06"	144.165	MGA GND
SSM 136460	SSM 136456	84°32'53"	298.629	SURVEY
		84°32'53"	298.627	MGA GND

'X'-'Y'

Surveyor: Brian Leslie James Blight
Date of Survey: 21/01/2013
Surveyor's Ref: 3056-P-DP

PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097

LGA: SINGLETON
Locality: HUNTERVIEW
Subdivision No: 16/2014
Lengths are in metres. Reduction Ratio 1: 2500

Registered: 27.8.2014

DP1196266

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 1 of 2 sheet(s)

Office Use Only

Registered: 27.8.2014

Title System: TORRENS

Purpose: SUBDIVISION

Office Use Only

DP1196266

PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097

LGA: SINGLETON

Locality: HUNTERVIEW

Parish: DARLINGTON

County: DURHAM

Crown Lands NSW/Western Lands Office Approval

I .... (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.

Signature: ....

Date: ....

File Number: ....

Office: ....

Subdivision Certificate

I, Mark Ihlein

*Authorised Person/~~*General Manager/*Accredited Certifier~~, certify that the provisions of s.109J of the *Environmental Planning and Assessment Act 1979* have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.

Signature: Mark Ihlein

Accreditation number: ....

Consent Authority: SINGLETON COUNCIL

Date of endorsement: 1 July 2014

Subdivision Certificate number: 16/2014

File number: DA 163/2010

*Strike through if inapplicable.

Survey Certificate

I, BRIAN LESLIE JAMES BLIGHT

of, LAND DEVELOPMENT SOLUTIONS PTY LTD
P.O. BOX 853 THE JUNCTION, NSW 2291

a surveyor registered under the *Surveying and Spatial Information Act 2002*, certify that:

*(a) The land shown in the plan was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on 21st January 2013

~~*(b) The part of the land shown in the plan (*being/*excluding ^ ....)~~ was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on, ... the part not surveyed was compiled ~~in accordance with that Regulation.~~

~~*(c) The land shown in this plan was compiled in accordance with the Surveying and Spatial Information Regulation 2012.~~

Signature: [signature] Dated: 21/01/2013

Surveyor ID: 41

Datum Line: X - Y

Type: *Urban/~~*Rural~~

The terrain is *Level-Undulating / ~~*Steep-Mountainous.~~

*Strike through if inapplicable.
^Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.

Statements of intention to dedicate public roads, public reserves and drainage reserves.

IT IS INTENDED TO DEDICATE GLASS PARADE TO THE PUBLIC AS ROAD.

Plans used in the preparation of survey/~~compilation.~~

D.P. 580356	D.P. 1140924
D.P. 617737	D.P. 1160705
D.P. 1057816	D.P. 1169307
D.P. 1091619	D.P. 1178578
D.P. 1092882	D.P. 1184988
D.P. 1107541	D.P. 1190910
D.P. 1120621	D.P. 1192097

If space is insufficient continue on PLAN FORM 6A

Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A

Surveyor's Reference: 3056-P-DP

PLAN FORM 6A (2012) **WARNING: Creasing or folding will lead to rejection** ePlan

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 2 of 2 sheet(s)

Office Use Only

Registered: 27.8.2014

Office Use Only

DP1196266

PLAN OF SUBDIVISION OF LOT 30 & 31 DP1140924, LOTS 224 & 225 DP1178578 AND LOT 437 DP1192097

This sheet is for the provision of the following information as required:
- A schedule of lots and addresses - See 60(c) *SSI Regulation 2012*
- Statements of intention to create and release affecting interests in accordance with section 88B *Conveyancing Act 1919*
- Signatures and seals- see 195D *Conveyancing Act 1919*
- Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.

Subdivision Certificate number: 16/2014

Date of Endorsement: 1 July 2014

SINGLETON COUNCIL Common Seal 1993

The COMMON SEAL of SINGLETON COUNCIL was hereto affixed on the 17th day of March 2014. pursuant to a Resolution passed at a meeting of the Council held on the 27th day of October 2008.

MAYOR

General Manager

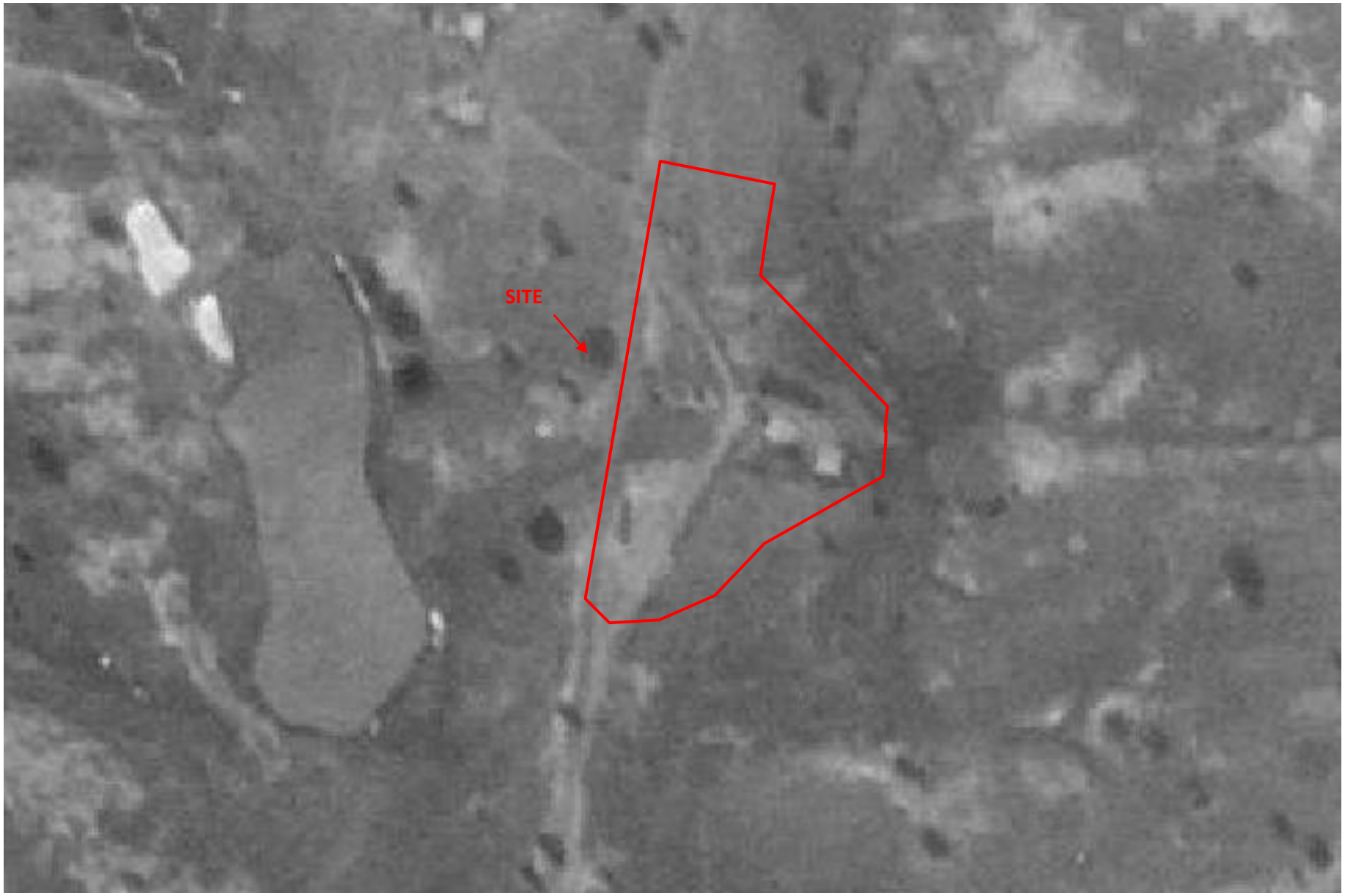
STREET ADDRESS SCHEDULE

LOT	STREET NUMBER	STREET NAME	STREET TYPE	LOCALITY
1	N/A	BRIDGMAN	ROAD	HUNTERVIEW
2	N/A	PEPPER	CLOSE	HUNTERVIEW
3	N/A	BRIDGMAN	ROAD	HUNTERVIEW
4	N/A	BRIDGMAN	ROAD	HUNTERVIEW
5	N/A	BRIDGMAN	ROAD	HUNTERVIEW
6	N/A	WATTLE PONDS	ROAD	HUNTERVIEW
7	N/A	PIONEER	ROAD	HUNTERVIEW
8	N/A	PIONEER	ROAD	HUNTERVIEW
9	N/A	DORRINGTON	ROAD	HUNTERVIEW
10	N/A	PIONEER	ROAD	HUNTERVIEW

If space is insufficient use additional annexure sheet

Surveyor's Reference: 3056-P-DP

ATTACHMENT F



GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 1951

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 14/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 1963

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 1974

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 1984

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 1990

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Aerial Photograph – 2000

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Google Image – 2008

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Google Image – 2010

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET
WARRIEWOOD NSW 2102

Ph: (02) 9979 1722
Fax: (02) 9979 1222

Google Image – 2013

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Lot 4 DP 1196266, Bridgman Road, Hunterview, NSW, 2330

Project No. 1401107	Drawn: JS	Checked: BP	Date: 6/01/15

ATTACHMENT G

Healthy Environment, Healthy Community, Healthy Business

Search results

Your search for:LGA: Singleton Shire Council

Matched 8 notices relating to 2 sites.

Search Again

Refine Search

Suburb	Address	Site Name	Notices related to this site
Putty	Putty Road	Putty Road Saw Mill	5 current and 2 former
Singleton	55-57 John Street	Singleton Gas Works	1 current

Page 1 of 1

5 January 2015

ATTACHMENT H

Healthy Environment, Healthy Community, Healthy Business

Search results

Your search for: **General Search** with the following criteria

Suburb - SINGLETON
returned 135 results

Export to excel 1 of 7 Pages Search Again

Number	Name	Location	Type	Status	Issued date
11985	AUSGRID	Maison Dieu Road, SINGLETON, NSW 2330	POEO licence	No longer in force	18 Aug 2004
1147	BITUPAVE LTD	DARLINGTON ROAD, SINGLETON, NSW 2330	POEO licence	Surrendered	28 Apr 2000
1501	BORAL RESOURCES (COUNTRY) PTY. LIMITED	DARLINGTON ROAD, SINGLETON, NSW 2330	POEO licence	No longer in force	22 Oct 1999
563	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	POEO licence	Issued	05 Jun 2000
1002352	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Dec 2000
1013329	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Dec 2001
1017720	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	24 Feb 2003
1040599	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	01 Dec 2004
1048638	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	10 Jun 2005
1080258	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Feb 2008
1097821	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	15 May 2009
1104189	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	26 Nov 2009
1501198	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	24 Oct 2011
1503040	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Dec 2011
1504642	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	28 Mar 2012
1506493	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Mar 2013
1516189	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Sep 2013
1524950	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Oct 2014
1526207	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	04 Dec 2014

1527405	BULGA COAL MANAGEMENT PTY LIMITED	BROKE ROAD, SINGLETON, NSW 2330	Compliance Audit	Complete	18 Dec 2014

1234567

05 January 2015

Healthy Environment, Healthy Community, Healthy Business

Search results

Your search for: **General Search** with the following criteria

Suburb - SINGLETON

returned 135 results

Export to excel

2 of 7 Pages

Search Again

Number	Name	Location	Type	Status	Issued date
640	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	POEO licence	Issued	29 Sep 2000
1003056	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	06 Dec 2000
1013521	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Dec 2001
1024752	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	26 Feb 2003
1040579	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Nov 2004
1044536	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	18 Mar 2005
1074619	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	26 Jun 2007
1088104	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	18 Jun 2008
1104190	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	26 Nov 2009
1110518	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	08 Jan 2010
1122039	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Dec 2010
1501227	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	08 Dec 2011
1506486	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	30 Nov 2012
1510522	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Mar 2013
1516195	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Sep 2013
1522185	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Oct 2014
1527406	COAL & ALLIED OPERATIONS PTY LTD	Lemington Rd , SINGLETON, NSW 2330	Compliance Audit	Complete	18 Dec 2014
11658	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT, SINGLETON, NSW 2330	POEO licence	Issued	25 Jul 2003
1073393	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT,	s.58 Licence Variation	Issued	01 Jun 2007

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		SINGLETON, NSW 2330			
1077143	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	04 Oct 2007

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Search results

Your search for: **General Search** with the following criteria

Suburb - SINGLETON
returned 135 results

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Number	Name	Location	Type	Status	Issued date
1093638	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	06 Jan 2009
1509757	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	26 Oct 2012
1515846	COSWORTH PTY LIMITED	18 ENTERPRISE CRESCENT, SINGLETON, NSW 2330	s.91 Clean Up Notice	Issued	03 Sep 2013
12325	DOWNER EDI MINING - BLASTING SERVICES PTY LTD	8 Melva Place, SINGLETON, NSW 2330	POEO licence	Issued	16 Aug 2005
1515802	DOWNER EDI MINING - BLASTING SERVICES PTY LTD	8 Melva Place, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Oct 2014
12614	EDL (OCI) PTY LIMITED	Cnr Nobles Land & Middle Falbrook Road, SINGLETON, NSW 2330	POEO licence	Issued	08 May 2007
1083698	EDL (OCI) PTY LIMITED	Cnr Nobles Land & Middle Falbrook Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Jun 2008
7622	GLENNIES CREEK COAL MANAGEMENT PTY LTD	640 MIDDLE FALBROOK ROAD, SINGLETON , NSW 2330	POEO licence	Surrendered	03 May 2000
1008343	GLENNIES CREEK COAL MANAGEMENT PTY LTD	640 MIDDLE FALBROOK ROAD, SINGLETON , NSW 2330	s.58 Licence Variation	Issued	13 Aug 2001
1035398	GLENNIES CREEK COAL MANAGEMENT PTY LTD	640 MIDDLE FALBROOK ROAD, SINGLETON , NSW 2330	s.58 Licence Variation	Issued	19 Mar 2004
1096949	GLENNIES CREEK COAL MANAGEMENT PTY LTD	640 MIDDLE FALBROOK ROAD, SINGLETON , NSW 2330	s.58 Licence Variation	Issued	30 Apr 2009
1104219	GLENNIES CREEK COAL MANAGEMENT PTY LTD	640 MIDDLE FALBROOK ROAD, SINGLETON , NSW 2330	s.58 Licence Variation	Issued	17 Nov 2009
11122	GROMOR ENTERPRISES PTY. LIMITED	MITCHELL LINE ROAD (GOLDEN HIGHWAY), SINGLETON, NSW 2330	POEO licence	Surrendered	16 Oct 2000
1037792	GROMOR ENTERPRISES PTY. LIMITED	MITCHELL LINE ROAD (GOLDEN HIGHWAY), SINGLETON, NSW 2330	s.58 Licence Variation	Issued	30 Jun 2004
681	HANSON CONSTRUCTION MATERIALS PTY LTD	MAISON DIEU ROAD, SINGLETON, NSW 2330	POEO licence	No longer in force	28 Feb 2000

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10267	HUNTER AND NEW ENGLAND AREA HEALTH SERVICE	Dangar Rd, SINGLETON, NSW 2330	POEO licence	No longer in force	18 Jan 2000
3390	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	POEO licence	Issued	27 Jul 2000
1002973	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Dec 2000
1003595	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	04 Jan 2001
1013302	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Dec 2001

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Search results

Your search for: **General Search** with the following criteria

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Number	Name	Location	Type	Status	Issued date
1014224	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	06 Jun 2002
1024222	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	10 Feb 2003
1052952	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	09 Feb 2006
1084010	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	02 May 2008
1104276	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	27 Nov 2009
1122514	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	17 Dec 2010
1502477	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Dec 2011
1510497	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Mar 2013
3085771298	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	Penalty Notice	Issued	19 Jun 2013
1514324	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	14 Aug 2013
1516277	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Sep 2013
1525136	INTEGRA COAL OPERATIONS PTY LTD	BRIDGMAN ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	15 Dec 2014
20028	LEIGHTON CONTRACTORS PTY LIMITED	SINGLETON, NSW 2330	POEO licence	Surrendered	29 Nov 2011
24	MOUNT THORLEY COAL LOADING LTD	MOUNT THORLEY ROAD, MOUNT THORLEY VIA, SINGLETON, NSW 2330	POEO licence	Issued	19 May 2000
1510149	MOUNT THORLEY COAL LOADING LTD	MOUNT THORLEY ROAD, MOUNT THORLEY VIA, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Nov 2012
1527403	MOUNT THORLEY COAL LOADING LTD	MOUNT THORLEY ROAD, MOUNT THORLEY VIA, SINGLETON, NSW 2330	Compliance Audit	Complete	18 Dec 2014
10620	MUSHROOM COMPOSTERS PTY LTD	Broke Rd, SINGLETON, NSW 2330	POEO licence	Issued	14 Jul 2000

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1036836	MUSHROOM COMPOSTERS PTY LTD	Broke Rd, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	28 May 2004
1097245	MUSHROOM COMPOSTERS PTY LTD	Broke Rd, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	27 Mar 2009
3981	ORICA AUSTRALIA PTY LTD	PIERCEFIELD ROAD, SINGLETON, NSW 2330	POEO licence	Surrendered	21 Sep 2000

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Search results

Your search for: **General Search** with the following criteria

Suburb - SINGLETON
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Number	Name	Location	Type	Status	Issued date
10337	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	POEO licence	Surrendered	23 Dec 1999
1003092	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Dec 2000
1013303	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Dec 2001
1024225	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	10 Feb 2003
1038296	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	18 Aug 2004
1044427	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	22 Feb 2005
1067134	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	13 Nov 2006
1083194	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 May 2008
1098030	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	15 May 2009
1501757	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Nov 2011
1502585	RESOURCE PACIFIC PTY LIMITED	MINING LEASES CML 1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Dec 2011
1503953	RESOURCE PACIFIC PTY	MINING LEASES CML	s.58 Licence	Issued	25 Jan 2012

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	LIMITED	1348 & CML 1349 & PART OF CML 378 , SINGLETON, NSW 2330	Variation		
3391	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	POEO licence	Issued	21 Aug 2000
1003033	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Dec 2000
1003580	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	03 Jan 2001
1006347	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	30 Jul 2001
1013328	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	07 Dec 2001
1024226	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	10 Feb 2003
1027971	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	11 Jun 2003
1039165	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	13 Oct 2004

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Search results

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Number	Name	Location	Type	Status	Issued date
1105339	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	27 Nov 2009
1122201	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	03 Mar 2011
1501491	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	28 Sep 2011
1502468	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	02 Dec 2011
1506559	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	09 Nov 2012
1510492	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	28 Mar 2013
1516536	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	08 Oct 2013
1524946	RIX'S CREEK PTY. LIMITED	RIX'S CREEK LANE, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	16 Oct 2014
3088	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	POEO licence	Issued	08 Feb 2000
5927	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	POEO licence	Issued	11 Oct 2000
1002424	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	13 Nov 2000
1005707	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	06 Jun 2001
1011592	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	11 Oct 2001
1006849	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	12 Mar 2002
1014594	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	23 Apr 2002
1027735	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	11 Jun 2003
1029201	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	27 Aug 2003
1035412	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	03 May 2004
1045020	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	03 May 2005

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1048163	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	20 Oct 2005

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Search results

Your search for: **General Search** with the following criteria

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returned 135 results

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Number	Name	Location	Type	Status	Issued date
1054160	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	04 May 2006
1061992	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	24 Aug 2006
1074941	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	27 Jun 2007
12728	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	POEO licence	Issued	12 Sep 2007
1076640	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	05 Oct 2007
1084447	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	18 Jun 2008
1090734	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	29 Sep 2008
1097097	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	23 Jan 2009
1097235	SINGLETON COUNCIL	DYRRING ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	20 Feb 2009
1120794	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	08 Dec 2010
1505921	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	21 Jun 2012
1510596	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	02 Jan 2013
1513126	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	09 May 2013
1514020	SINGLETON COUNCIL	Gresford Road, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	09 May 2013
1524272	SINGLETON COUNCIL	ARMY CAMP ROAD, SINGLETON, NSW 2330	s.58 Licence Variation	Issued	04 Dec 2014

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Search results

Your search for: **General Search** with the following criteria

Suburb - SINGLETON HEIGHTS

returned 0 result

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ATTACHMENT I

Suburb/City	Site Description	Site Address	Activity that caused contamination	s60 Form received
Abbotsford	Former Gasworks	43 St Albans Street	Gasworks	Contamination currently regulated under the CLM Act
Seven Hills	Mobil Service Station	151 Prospect Highway	Service Station	Under assessment
Seven Hills	Transport Infrastructure Development Corporation	1 Powers Road	Other Industry	Under assessment
Shelly Beach	Former Shelley Beach Landfill	Oaks Avenue	Landfill	Under assessment
Shortland	BP Service Station	298-302 Sandgate Road	Service Station	Regulation under the CLM Act not required
Shortland	Former Astra St landfill	1, 2 & 28 Astra Street	Landfill	Contamination currently regulated under the CLM Act
Shortland	Former Lorna St landfill	8/475 Sandgate Road	Landfill	Regulation under the CLM Act not required
Shortland	Tuxford Park landfill	10 King Street	Landfill	Regulation under the CLM Act not required
Silverwater	Department of Corrective Services land adjacent to the former Auburn Landfill	Jamieson Street	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)
Silverwater	Former Auburn Landfill	Jamieson Street	Landfill	Contamination formerly regulated under the CLM Act
Silverwater	Silverwater Landfill	Carnarvon Road	Landfill	Regulation being finalised
Silverwater	Vacant property	103-105 Silverwater Road	Other Industry	Under assessment
Silverwater	Wilson Park (Former oil gas plant site)	Holker Busway	Gasworks	Ongoing maintenance required to manage residual contamination (CLM Act)
Singleton	BP Service Station	53 George Street	Other Petroleum	Under assessment
Singleton	Bulga Surface Operations	Broke Road	Other Industry	Under assessment
Singleton	Mobil Singleton Airport Elt	Range Road	Other Petroleum	Under assessment
Singleton	Putty Saw Mill	Putty Road via Singleton	Unclassified	Contamination currently regulated under the CLM Act
Singleton	Shell Coles Express Service Station	69-73 George Street	Service Station	Under assessment
Singleton	Singleton Gasworks	55-57 John Street	Gasworks	Contamination currently regulated under the CLM Act
Smiggin Holes, Kosciuszko National Park	Smiggin Holes Snow Clearing Shed	Link Road	Landfill	Regulation under the CLM Act not required
Smithfield	Caltex Service Station	16-18 Tait Street	Service Station	Under assessment
Smithfield	Former Landfill	Little Street	Landfill	Contamination being managed via the planning process (EP&A Act)
Smithfield	Freestones	1 Hume Road	Other Petroleum	Under assessment
Smithfield	Liquip International	13 Hume Road	Other Industry	Under assessment
Smithfield	Mobil Service Station	227 Smithfield Road	Service Station	Under assessment

ATTACHMENT J

No Results Found

No parcel found for Lot **4** DP/SP **1196266**. Only parcels within 500m of a known UXO area are available. Defence is actively engaged in identifying areas where U likely to be present. Members of the public can assist in this process. If you have any information that may be of assistance please contact UXO@defence.gov.a email.

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ATTACHMENT K

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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.

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Attention: **Jenna Seymour**

Report **443967-S**
Project name 14011007
Received Date Jan 09, 2015

Client Sample ID			**S1/0.0-0.2**	**S2/0.0-0.2**	**S3/0.0-0.2**	**S4/0.0-0.2**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S15-Ja02193**	**S15-Ja02194**	**S15-Ja02195**	**S15-Ja02196**
Date Sampled			**Jan 07, 2015**	**Jan 07, 2015**	**Jan 07, 2015**	**Jan 07, 2015**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	95	94	91	88
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			S1/0.0-0.2	S2/0.0-0.2	S3/0.0-0.2	S4/0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S15-Ja02193	S15-Ja02194	S15-Ja02195	S15-Ja02196
Date Sampled			Jan 07, 2015	Jan 07, 2015	Jan 07, 2015	Jan 07, 2015
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	105	97	101	104
p-Terphenyl-d14 (surr.)	1	%	114	106	110	119
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Dibutylchlorendate (surr.)	1	%	93	89	94	100
Tetrachloro-m-xylene (surr.)	1	%	114	113	111	124
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	93	89	94	100
Tetrachloro-m-xylene (surr.)	1	%	114	113	111	124
Heavy Metals						
Arsenic	2	mg/kg	5.9	8.8	6.2	7.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	14	12	12	17
Copper	5	mg/kg	8.7	8.3	7.1	10
Lead	5	mg/kg	12	13	12	47

Client Sample ID			S1/0.0-0.2	S2/0.0-0.2	S3/0.0-0.2	S4/0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S15-Ja02193	S15-Ja02194	S15-Ja02195	S15-Ja02196
Date Sampled			Jan 07, 2015	Jan 07, 2015	Jan 07, 2015	Jan 07, 2015
Test/Reference	LOR	Unit				
Heavy Metals						
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	13	16	12	10
Zinc	5	mg/kg	34	36	29	52
% Moisture	0.1	%	2.6	4.6	3.1	17

Client Sample ID			S5/0.0-0.2	S6/0.0-0.2	S7/0.0-0.2	S8/0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S15-Ja02197	S15-Ja02198	S15-Ja02199	S15-Ja02200
Date Sampled			Jan 07, 2015	Jan 07, 2015	Jan 07, 2015	Jan 07, 2015
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	92	88	88	86
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	1.0	< 0.5	< 0.5	< 0.5

Client Sample ID			S5/0.0-0.2	S6/0.0-0.2	S7/0.0-0.2	S8/0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S15-Ja02197	S15-Ja02198	S15-Ja02199	S15-Ja02200
Date Sampled			Jan 07, 2015	Jan 07, 2015	Jan 07, 2015	Jan 07, 2015
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	1.0	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	2.0	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	108	104	100	104
p-Terphenyl-d14 (surr.)	1	%	122	114	110	115
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Dibutylchlorendate (surr.)	1	%	83	78	80	86
Tetrachloro-m-xylene (surr.)	1	%	107	107	113	110
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	83	78	80	86
Tetrachloro-m-xylene (surr.)	1	%	107	107	113	110
Heavy Metals						
Arsenic	2	mg/kg	5.4	6.3	7.2	6.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	12	13	14
Copper	5	mg/kg	7.8	6.4	6.6	10
Lead	5	mg/kg	23	11	12	26

Client Sample ID			S5/0.0-0.2	S6/0.0-0.2	S7/0.0-0.2	S8/0.0-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S15-Ja02197	S15-Ja02198	S15-Ja02199	S15-Ja02200
Date Sampled			Jan 07, 2015	Jan 07, 2015	Jan 07, 2015	Jan 07, 2015
Test/Reference	LOR	Unit				
Heavy Metals						
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	11	12	13	12
Zinc	5	mg/kg	41	24	23	65
% Moisture	0.1	%	2.8	18	12	5.2

Client Sample ID			D1
Sample Matrix			Soil
Eurofins | mgt Sample No.			S15-Ja02201
Date Sampled			Jan 07, 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	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-36 (Total)	50	mg/kg	< 50
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	%	86
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	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5

Client Sample ID			D1
Sample Matrix			Soil
Eurofins | mgt Sample No.			S15-Ja02201
Date Sampled			Jan 07, 2015
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	117
p-Terphenyl-d14 (surr.)	1	%	129
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Dibutylchlorendate (surr.)	1	%	71
Tetrachloro-m-xylene (surr.)	1	%	90
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	71
Tetrachloro-m-xylene (surr.)	1	%	90
Heavy Metals			
Arsenic	2	mg/kg	6.7
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	12
Copper	5	mg/kg	7.8
Lead	5	mg/kg	12

Client Sample ID			D1
Sample Matrix			**Soil**
Eurofins | mgt Sample No.			**S15-Ja02201**
Date Sampled			**Jan 07, 2015**
Test/Reference	LOR	Unit	
Heavy Metals			
Mercury	0.05	mg/kg	< 0.05
Nickel	5	mg/kg	13
Zinc	5	mg/kg	31
% Moisture	0.1	%	3.1

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
Eurofins | mgt Suite 9			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jan 16, 2015	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jan 16, 2015	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 16, 2015	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 16, 2015	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Organochlorine Pesticides	Sydney	Jan 16, 2015	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Metals M8	Sydney	Jan 19, 2015	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
Polychlorinated Biphenyls	Sydney	Jan 16, 2015	28 Day
% Moisture	Sydney	Jan 09, 2015	14 Day
- Method: LTM-GEN-7080 Moisture			

eurofins | mgt

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Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: 14011007

Order No.:
Report #: 443967
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Jan 9, 2015 12:10 PM
Due: Jan 16, 2015
Priority: 5 Day
Contact Name: Jenna Seymour

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					% Moisture	HOLD	Polychlorinated Biphenyls	Eurofins | mgt Suite 9
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**				
S1/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02193	X		X	X
S2/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02194	X		X	X
S3/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02195	X		X	X
S4/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02196	X		X	X
S5/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02197	X		X	X
S6/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02198	X		X	X
S7/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02199	X		X	X
S8/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02200	X		X	X
D1	Jan 07, 2015		Soil	S15-Ja02201	X		X	X
T1	Jan 07, 2015		Soil	S15-Ja02202		X		

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Company Name:	Geo-Logix P/L	**Order No.:**		**Received:**	Jan 9, 2015 12:10 PM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	443967	**Due:**	Jan 16, 2015
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Project Name:	14011007				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					% Moisture	HOLD	Polychlorinated Biphenyls	Eurofins | mgt Suite 9
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								
R1	Jan 07, 2015		Water	S15-Ja02203		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	
TRH C10-36 (Total)	mg/kg	< 0			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	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB	mg/kg	< 0.5			0.5	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	%	90			70-130	Pass	
TRH C10-C14	%	71			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	89			70-130	Pass	
Toluene	%	87			70-130	Pass	
Ethylbenzene	%	85			70-130	Pass	
m&p-Xylenes	%	88			70-130	Pass	
o-Xylene	%	87			70-130	Pass	
Xylenes - Total	%	88			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	82			70-130	Pass	
TRH C6-C10	%	83			70-130	Pass	
TRH >C10-C16	%	91			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	106			70-130	Pass	
Acenaphthylene	%	108			70-130	Pass	
Anthracene	%	109			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	%	106			70-130	Pass	
Benzo(a)pyrene	%	114			70-130	Pass	
Benzo(b&j)fluoranthene	%	100			70-130	Pass	
Benzo(g.h.i)perylene	%	97			70-130	Pass	
Benzo(k)fluoranthene	%	114			70-130	Pass	
Chrysene	%	116			70-130	Pass	
Dibenz(a.h)anthracene	%	92			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	102			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	95			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	112			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	109			70-130	Pass	
4.4'-DDD	%	108			70-130	Pass	
4.4'-DDE	%	113			70-130	Pass	
4.4'-DDT	%	90			70-130	Pass	
a-BHC	%	117			70-130	Pass	
Aldrin	%	120			70-130	Pass	
b-BHC	%	107			70-130	Pass	
d-BHC	%	96			70-130	Pass	
Dieldrin	%	110			70-130	Pass	
Endosulfan I	%	114			70-130	Pass	
Endosulfan II	%	108			70-130	Pass	
Endosulfan sulphate	%	94			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	101			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-BHC (Lindane)	%	110			70-130	Pass	
Heptachlor	%	104			70-130	Pass	
Heptachlor epoxide	%	113			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
Toxaphene	%	86			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	105			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	111			70-130	Pass	
Cadmium	%	114			70-130	Pass	
Chromium	%	111			70-130	Pass	
Copper	%	112			70-130	Pass	
Lead	%	115			70-130	Pass	
Mercury	%	109			70-130	Pass	
Nickel	%	107			70-130	Pass	
Zinc	%	111			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S15-Ja02334	NCP	%	107			70-130	Pass	
4.4'-DDD	S15-Ja02334	NCP	%	114			70-130	Pass	
4.4'-DDE	S15-Ja02334	NCP	%	116			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDT	S15-Ja02334	NCP	%	86			70-130	Pass	
a-BHC	S15-Ja02334	NCP	%	119			70-130	Pass	
Aldrin	S15-Ja02334	NCP	%	118			70-130	Pass	
b-BHC	S15-Ja02334	NCP	%	102			70-130	Pass	
d-BHC	S15-Ja02334	NCP	%	96			70-130	Pass	
Dieldrin	S15-Ja02334	NCP	%	113			70-130	Pass	
Endosulfan I	S15-Ja02334	NCP	%	110			70-130	Pass	
Endosulfan II	S15-Ja02334	NCP	%	106			70-130	Pass	
Endosulfan sulphate	S15-Ja02334	NCP	%	94			70-130	Pass	
Endrin	S15-Ja02334	NCP	%	114			70-130	Pass	
Endrin aldehyde	S15-Ja02334	NCP	%	97			70-130	Pass	
Endrin ketone	S15-Ja02334	NCP	%	93			70-130	Pass	
g-BHC (Lindane)	S15-Ja02334	NCP	%	113			70-130	Pass	
Heptachlor	S15-Ja02334	NCP	%	104			70-130	Pass	
Heptachlor epoxide	S15-Ja02334	NCP	%	115			70-130	Pass	
Methoxychlor	S15-Ja02334	NCP	%	87			70-130	Pass	
Toxaphene	S15-Ja03232	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S15-Ja02194	CP	%	89			70-130	Pass	
TRH C10-C14	S15-Ja02194	CP	%	78			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S15-Ja02194	CP	%	90			70-130	Pass	
Toluene	S15-Ja02194	CP	%	87			70-130	Pass	
Ethylbenzene	S15-Ja02194	CP	%	87			70-130	Pass	
m&p-Xylenes	S15-Ja02194	CP	%	89			70-130	Pass	
o-Xylene	S15-Ja02194	CP	%	88			70-130	Pass	
Xylenes - Total	S15-Ja02194	CP	%	88			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S15-Ja02194	CP	%	78			70-130	Pass	
TRH C6-C10	S15-Ja02194	CP	%	82			70-130	Pass	
TRH >C10-C16	S15-Ja02194	CP	%	100			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S15-Ja02194	CP	%	113			70-130	Pass	
Acenaphthylene	S15-Ja02194	CP	%	106			70-130	Pass	
Anthracene	S15-Ja02194	CP	%	110			70-130	Pass	
Benz(a)anthracene	S15-Ja02194	CP	%	114			70-130	Pass	
Benzo(a)pyrene	S15-Ja02194	CP	%	107			70-130	Pass	
Benzo(b&j)fluoranthene	S15-Ja02194	CP	%	106			70-130	Pass	
Benzo(g.h.i)perylene	S15-Ja02194	CP	%	116			70-130	Pass	
Benzo(k)fluoranthene	S15-Ja02194	CP	%	113			70-130	Pass	
Chrysene	S15-Ja02194	CP	%	113			70-130	Pass	
Dibenz(a.h)anthracene	S15-Ja02194	CP	%	108			70-130	Pass	
Fluoranthene	S15-Ja02194	CP	%	124			70-130	Pass	
Fluorene	S15-Ja02194	CP	%	105			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S15-Ja02194	CP	%	112			70-130	Pass	
Naphthalene	S15-Ja02194	CP	%	112			70-130	Pass	
Phenanthrene	S15-Ja02194	CP	%	109			70-130	Pass	
Pyrene	S15-Ja02194	CP	%	124			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aroclor-1260	S15-Ja02194	CP	%	105			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S15-Ja02194	CP	%	87			70-130	Pass	
Cadmium	S15-Ja02194	CP	%	102			70-130	Pass	
Chromium	S15-Ja02194	CP	%	98			70-130	Pass	
Copper	S15-Ja02194	CP	%	95			70-130	Pass	
Lead	S15-Ja02194	CP	%	92			70-130	Pass	
Mercury	S15-Ja02194	CP	%	97			70-130	Pass	
Nickel	S15-Ja02194	CP	%	84			70-130	Pass	
Zinc	S15-Ja02194	CP	%	85			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-Ja02193	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S15-Ja02193	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S15-Ja02193	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S15-Ja02193	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S15-Ja02193	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S15-Ja02193	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S15-Ja01332	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10 less BTEX (F1)	S15-Ja01332	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S15-Ja02193	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S15-Ja02193	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S15-Ja02193	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S15-Ja02193	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S15-Ja02193	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S15-Ja02193	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S15-Ja02193	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S15-Ja02193	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S15-Ja06376	NCP	mg/kg	< 2	2.2	11	30%	Pass	
Cadmium	S15-Ja06376	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S15-Ja06376	NCP	mg/kg	6.0	7.0	16	30%	Pass	
Copper	S15-Ja06376	NCP	mg/kg	37	41	10	30%	Pass	
Lead	S15-Ja06376	NCP	mg/kg	6.5	8.4	25	30%	Pass	
Mercury	S15-Ja06376	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Nickel	S15-Ja06376	NCP	mg/kg	6.4	7.4	13	30%	Pass	
Zinc	S15-Ja06376	NCP	mg/kg	26	35	27	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S15-Ja02193	CP	%	2.6	3.1	18	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S15-Ja02198	CP	%	18	18	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.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

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

443967

Geo-Logix Pty Ltd
Building Q2, Level 3
2309/4 Daydream St
Warriewood, NSW 2102

ABN: 86 116 892 936

P: (02) 9979 1722
F: (02) 9979 1222

CHAIN OF CUSTODY

Page 1 of 1

Project Manager: Jenna Seymour
Contact email: jseymour@geo-logix.com.au
Project Name:
Project Number: 401007 Date Submitted: 9.1.15

Purchase Order No:
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	Phenols	Metals - M8	Metals - Lead	Metals - Specify **	TCLP	Asbestos	Foreign Materials	pH	Conductivity (EC)	SO_4, Cl-				Hold	SUITE
	S1/0.0-0.2	7.1.15	X												X																	B9
	S2/0.0-0.2		X												X																	B9
	S3/0.0-0.2		X												X																	B9
	S4/0.0-0.2		X												X																	B9
	S5/0.0-0.2		X												X																	B9
	S6/0.0-0.2		X												X																	B9
	S7/0.0-0.2		X												X																	B9
	S8/0.0-0.2		X												X																	B9
	D1		X												X																	B9
	T1		X																													
	R1			X																										X		
																														X		

Eurofins MGT Suite Codes

- B1 TRH/BTEX
- B2 TRH/BTEX/Pb
- B3 PAH/Phenols
- B4 TRH/BTEX/PAH
- B5 TRH/BTEX/M7
- B6 TRH/BTEX/M8
- B7 TRH/BTEX/PAH/M8
- B8 TRH/VOC/PAH/M8
- B9 TRH/BTEX/PAH/OCP/M8
- B10 TRH/BTEX/PAH/OCP/OPP/M8
- B11 Anion/Cation Screen
- B12 TRH/BTEX/Oxygenates
- B13 OCP/PCB
- B14 OCP/OPP
- B15 OCP/OPP/PCB
- B16 Natural Attenuation #1
- B17 Natural Attenuation #2
- B18 Fluoride/Cyanide

Metals(circle)** As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr^{6+}, Cr^{3+}, Fe^{2+}, Fe^{3+}, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by: Date/Time: Signature:
Received by: TOLLFAST 133 Date/Time: 9/1/15 10-30a Signature:

Sea 9/1 12:10

eurofins | mgt

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com.au web : www.eurofins.com.au

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Sample Receipt Advice

Company name: **Geo-Logix P/L**

Contact name: Jenna Seymour
Project name: 14011007
COC number: Not provided
Turn around time: 5 Day
Date/Time received: Jan 9, 2015 12:10 PM
Eurofins | mgt reference: **443967**

Please note that as detailed in our EnviroNote 1049 released 27th Nov 2014 all samples received as of 18th Dec 2014 the nominated TAT on the Sample Receipt Advice (SRA) will be provided where possible, however due to the holiday period TAT will not be guaranteed until 12th Jan 2015.
Where earlier TAT is required you are encouraged to speak with one of our Analytical Service Managers (ASM) to see if your requirements can be met.
For samples received from 5th Jan 2015 the nominated Reporting date on the SRA will be adhered to unless otherwise communicated by your ASM.

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 9 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

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

Charl Du Preez on Phone : or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Jenna Seymour - jseymour@geo-logix.com.au.

eurofins | mgt

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com.au web : www.eurofins.com.au

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Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Project Name: 14011007

Order No.:
Report #: 443967
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Jan 9, 2015 12:10 PM
Due: Jan 16, 2015
Priority: 5 Day
Contact Name: Jenna Seymour

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					% Moisture	HOLD	Polychlorinated Biphenyls	Eurofins | mgt Suite 9
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**				
S1/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02193	X		X	X
S2/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02194	X		X	X
S3/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02195	X		X	X
S4/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02196	X		X	X
S5/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02197	X		X	X
S6/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02198	X		X	X
S7/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02199	X		X	X
S8/0.0-0.2	Jan 07, 2015		Soil	S15-Ja02200	X		X	X
D1	Jan 07, 2015		Soil	S15-Ja02201	X		X	X
T1	Jan 07, 2015		Soil	S15-Ja02202		X		

eurofins | mgt

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com.au web : www.eurofins.com.au

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1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name:	Geo-Logix P/L	**Order No.:**		**Received:**	Jan 9, 2015 12:10 PM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	443967	**Due:**	Jan 16, 2015
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Project Name:	14011007				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					% Moisture	HOLD	Polychlorinated Biphenyls	Eurofins | mgt Suite 9
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								
R1	Jan 07, 2015		Water	S15-Ja02203		X		

TABLES

TABLE 1
Summary of Soil Analytical Data
TRH / BTEXN
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

SOIL TYPE	SAND							
	Sample Depth (m)	F1	F2	B	T		X	N
Assessment Criteria	0m - <1m	260	NL	3	NL	NL	230	NL
	1m - <2m	370	NL	3	NL	NL	NL	NL
	2m - <4m	630	NL	3	NL	NL	NL	NL
	4m+	NL	NL	3	NL	NL	NL	NL

Sample ID	Date	Boring ID	Sample Interval		F1	F2	B	T	E	X	N
			Min (m)	Max (m)							
S1/0.0-0.2	07/01/15	S1	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S2/0.0-0.2	07/01/15	S2	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S3/0.0-0.2	07/01/15	S3	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S4/0.0-0.2	07/01/15	S4	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S5/0.0-0.2	07/01/15	S5	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S6/0.0-0.2	07/01/15	S6	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S7/0.0-0.2	07/01/15	S7	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
S8/0.0-0.2	07/01/15	S8	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5
D1	07/01/15	S2	0.0	0.2	<20	<50	<0.1	<0.1	<0.1	<0.3	<0.5

Sample	Duplicate/Triplicate	RPD%						
S2/0.0-0.2	D1	nc	nc	nc	nc	nc	nc	nc

Notes:
Assessment Criteria = NEPC (1999) Amended HSLs D Soil Vapour Intrusion - mg/kg
Total concentrations in milligrams per kilogram (mg/kg)
NL = not limiting
<# = analyte not detected at concentration in excess of laboratory reporting limits
- = sample not analysed
-- = not applicable
D1 = field duplicate of S2/0.0-0.2
RPD% = Relative Percentage Difference between primary and field duplicate/triplicate samples
nc = RPD not calculated, one or both samples below laboratory limits
Red and/or **bold** indicates exceedence of Assessment Criteria
F1 = TRH C6-C10 less BTEX
F2 = TRH >C10-C16 less Naphthalene
BTEXN = Benzene Toluene Ethylbenzene Xylenes (m,p&o) Naphthalene

Prepared By: JS
Checked By: BP

TABLE 2
Summary of Soil Analytical Data
TPH Management Limits
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

TPH Fraction	Managements Limits	Sample ID	S1	S2	D1	RPD*	S3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	%	7/01/2015
C_6 - C_{10}	700		<20	<20	<20	*nc*	<20
$>C_{10}$ - C_{16}	1000		<50	<50	<50	*nc*	<50
$>C_{16}$ - C_{34}	3500		<100	<100	<100	*nc*	100
$>C_{34}$ - C_{40}	10000		<100	<100	<100	*nc*	<100

Notes:

Management Limits = NEPC (1999) Amended - Management Limits for TPH fractions F1 - F4 in soil: Commercial and Industrial - Course Soil Texture

Concentrations in milligrams/kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Mangagement Limits

-- = not applicable

Prepared By: JS
Checked By: BP

TABLE 2
Summary of Soil Analytical Data
TPH Management Limits
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

TPH Fraction	Managements Limits	Sample ID	S4	S5	S6	S7	S8
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	7/01/2015	7/01/2015
C_6 - C_{10}	700		<20	<20	<20	<20	<20
$>C_{10}$ - C_{16}	1000		<50	<50	<50	<50	<50
$>C_{16}$ - C_{34}	3500		<100	<100	<100	<100	<100
$>C_{34}$ - C_{40}	10000		<100	<100	<100	<100	<100

Notes:

Management Limits = NEPC (1999) Amended - Management Limits for TPH fractions F1 - F4 in soil: Commercial and Industrial - Course Soil Texture

Concentrations in milligrams/kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Mangagement Limits

-- = not applicable

Prepared By: JS
Checked By: BP

TABLE 3:
Summary of Soil Analytical Data
Metals
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

Metals	Assessment Criteria	Sample ID	S1	S2	D1	RPD*	S3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	-	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	%	7/01/2015
Arsenic	3000		5.9	8.8	6.7	*27*	6.2
Cadmium	900		< 0.4	< 0.4	< 0.4	*nc*	< 0.4
Chromium	3600*		14	12	12	*0*	12
Copper	240,000		8.7	8.3	7.8	*6*	7.1
Lead	1500		12	13	12	*8*	12
Mercury (inorganic)	730		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Nickel	6000		13	16	13	*21*	12
Zinc	400,000		34	36	31	*15*	29

Notes:
Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial
Total concentrations in milligrams per kilogram (mg/kg)
<# = analyte not detected at concentration in excess of laboratory reporting limits
- = sample not analysed
D1 = field duplicate of S2/0.0-0.2
RPD* = Relative Percent Difference between primary sample and field duplicate sample
nc = RPD not calcuated, one or both samples below laboratory reporting limits
Bold indicates exceedance of Assessment Criteria
* Guideline value for Chromium VI

Prepared By: JS
Checked By: BP

TABLE 3:
Summary of Soil Analytical Data
Metals
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

Metals	Assessment Criteria	Sample ID	S4	S5	S6	S7	S8
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	7/01/2015	7/01/2015
Arsenic	3000		7	5.4	6.3	7.2	6.7
Cadmium	900		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	3600*		17	13	12	13	14
Copper	240,000		10	7.8	6.4	6.6	10
Lead	1500		47	23	11	12	26
Mercury (inorganic)	730		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	6000		10	11	12	13	12
Zinc	400,000		52	41	24	23	65

Notes:

Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

D1 = field duplicate of S2/0.0-0.2

RPD* = Relative Percent Difference between primary sample and field duplicate sample

nc = RPD not calcuated, one or both samples below laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

* Guideline value for Chromium VI

Prepared By: JS
Checked By: BP

TABLE 4:
Summary of Systematic Soil Analytical Data
Organochlorine Pesticides
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

OCP	Assessment Criteria	Sample ID	S1	S2	D1	RPD*	S3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	--	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	%	7/01/2015
4.4'-DDD	3600***		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
4.4'-DDE	3600***		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
4.4'-DDT	3600***		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
a-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Aldrin	45*		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Chlordane	530		< 0.1	< 0.1	< 0.1	*nc*	< 0.1
d-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Dieldrin	45*		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endosulfan I	2000**		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endosulfan II	2000**		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	*nc*	< 0.05
Methoxychlor	2500		< 0.2	< 0.2	< 0.2	*nc*	< 0.2
Toxophene	160		< 1	< 1	< 1	*nc*	< 1

Notes:
Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial
Total concentrations in milligrams per kilogram (mg/kg)
n/a = assessment criteria not available
<# = analyte not detected at concentration in excess of laboratory reporting limits
D1 = field duplicate of S2/0.0-0.2
RPD* = Relative Percent Difference between primary sample and field duplicate sample
nc = RPD not calcuated, one or both samples below laboratory reporting limits
Bold indicates exceedance of Assessment Criteria
* = combine Aldrin + Dieldrin concentration
** = combine Endosulfan I + Endosulfan II concentration
*** = combined DDD, DDE and DDT concentration

Prepared By: JS
Checked By: BP

TABLE 4:
Summary of Systematic Soil Analytical Data
Organochlorine Pesticides
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

OCP	Assessment Criteria	Sample ID	S4	S5	S6	S7	S8
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	7/01/2015	7/01/2015
4.4'-DDD	3600***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	3600***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	3600***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	45*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlordane	530		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
d-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	45*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	2000**		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	2000**		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	100		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	80		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	2500		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Toxophene	160		< 1	< 1	< 1	< 1	< 1

Notes:

Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial

Total concentrations in milligrams per kilogram (mg/kg)

n/a = assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

D1 = field duplicate of S2/0.0-0.2

RPD* = Relative Percent Difference between primary sample and field duplicate sample

nc = RPD not calcuated, one or both samples below laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

* = combine Aldrin + Dieldrin concentration

** = combine Endosulfan I + Endosulfan II concentration

*** = combined DDD, DDE and DDT concentration

Prepared By: JS
Checked By: BP

TABLE 5:
Summary Soil Analytical Data
PCBs
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

PCBs	Assessment Criteria	Sample ID	S1	S2	D1	RPD*	S3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	--	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	%	7/01/2015
Aroclor-1016	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Aroclor-1221	n/a		< 0.1	< 0.1	< 0.1	*nc*	< 0.1
Aroclor-1232	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Aroclor-1242	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Aroclor-1248	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Aroclor-1254	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Aroclor-1260	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Total PCB	7		< 0.5	< 0.5	< 0.5	*nc*	< 0.5

Notes:
Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial
Concentrations in milligrams/kilogram (mg/kg)
n/a = Assesment criteria not available
D1 = field duplicate of S2/0.0-0.2
nc = RPD not calcuated, one or both samples below EQL
RPD* = Relative Percent Difference between primary sample and field duplicate sample
<# = analyte not detected at concentration in excess of laboratory reporting limits
-- = sample not analysed
Bold indicates exceedance of Assessment Criteria

Prepared By: JS
Checked By: BP

TABLE 6:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

PAHs	Assessment Criteria	Sample ID	S1	S2	D1	RPD*	S3
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	--	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	%	7/01/2015
Acenaphthene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Acenaphthylene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Anthracene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benz(a)anthracene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(a)pyrene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(b&j)fluoranthene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(g,h,i)perylene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(k)fluoranthene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Chrysene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Dibenz(a,h)anthracene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Fluoranthene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Fluorene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Indeno(1,2,3-c,d)pyrene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Naphthalene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Phenanthrene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Pyrene	n/a		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Sum of reported PAHs	4000		< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Carcinogenic PAHs	40		0.6	0.6	0.6	*0*	0.6

Notes:
Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial
Total concentrations in milligrams per kilogram (mg/kg)
n/a = assessment critieria not available
<# = analyte not detected at concentration in excess of laboratory reporting limits
D1 = field duplicate of S2/0.0-0.2
RPD* = Relative Percent Difference between primary sample and field duplicate sample
nc = RPD not calcuated, one or both samples below laboratory reporting limits
Bold indicates exceedance of Assessment Criteria

Prepared By: JS
Checked By: BP

TABLE 6:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

PAHs	Assessment Criteria	Sample ID	S4	S5	S6	S7	S8
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	7/01/2015	7/01/2015
Acenaphthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	n/a		< 0.5	1	< 0.5	< 0.5	< 0.5
Fluorene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-c,d)pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	n/a		< 0.5	1	< 0.5	< 0.5	< 0.5
Sum of reported PAHs	4000		< 0.5	2	< 0.5	< 0.5	< 0.5
Carcinogenic PAHs	40		0.6	0.6	0.6	0.6	0.6

Notes:

Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial

Total concentrations in milligrams per kilogram (mg/kg)

n/a = assessment critieria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

D1 = field duplicate of S2/0.0-0.2

RPD* = Relative Percent Difference between primary sample and field duplicate sample

nc = RPD not calcuated, one or both samples below laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

Prepared By: JS
Checked By: BP

TABLE 5:
Summary Soil Analytical Data
PCBs
Lot 4 DP 1196266,
Bridgman Road, Hunterview NSW

PCBs	Assessment Criteria	Sample ID	S4	S5	S6	S7	S8
		Depth (m)	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2
		Date	7/01/2015	7/01/2015	7/01/2015	7/01/2015	7/01/2015
Aroclor-1016	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	n/a		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB	7		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:
Assessment Criteria = NEPC (1999) Amended HIL 'D' Commercial/Industrial
Concentrations in milligrams/kilogram (mg/kg)
n/a = Assesment criteria not available
D1 = field duplicate of S2/0.0-0.2
nc = RPD not calcuated, one or both samples below EQL
RPD* = Relative Percent Difference between primary sample and field duplicate sample
<# = analyte not detected at concentration in excess of laboratory reporting limits
-- = sample not analysed
Bold indicates exceedance of Assessment Criteria

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