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Report on
Preliminary Site Investigation (Contamination) with Limited Sampling

Jindabyne Central School
Part Lot 101, DP1019527, Jindabyne

Prepared for
NSW Department of Education - School Infrastructure NSW

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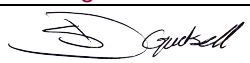
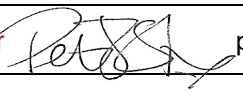
Author		Shannon Goodsell	1 December 2021
Reviewer		p.p. Dean Woods	1 December 2021

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Executive Summary

This Preliminary Site Investigation (Contamination) with Limited Sampling (PSI-L) conducted by Douglas Partners Pty Ltd (DP) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD No 15788005). The SSDA is for a new education campus at Jindabyne, comprising of a new primary and high school, located at the Jindabyne Sport and Recreation Centre (JSRC).

- Key Issue 19 – Contamination:
    - Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority:
        - PSI-L (contamination).

The objective of the PSI-L was to identify potential sources of contamination and determine the potential contaminants of concern, identify areas of potential contamination, identify human and ecological receptors associated with the proposed development and identify potentially affected media (soil, groundwater, ground gas etc.).

The PSI-L included the following scope of works:

- Preparation of a list of Potential Areas of Environmental Concern (PAEC) through investigation of the site by the following methods:
    - Review of local topographic, soil, geological, salinity and acid sulfate soils mapping;
    - Review of available historical aerial photography for the site to identify land uses and changes in the land that may indicate a potential for contamination;
    - Search of the NSW EPA contaminated land records to determine the existence of statutory notices current on any parts of the site, or adjacent land, under the Contaminated Land Management Act (1997) and licences (if any) under the Protection of the Environment Operations Act (1997);
    - Search through the dangerous goods database held by SafeWork NSW;
    - NSW Office of Water groundwater bore search;
    - Summary of current and historic titles and Deposited Plans to identify previous owners that may indicate potentially contaminating activities that may have occurred on site; and
    - Review of readily available Council records and Section 10.7 (formerly Section 149) certificate.
- Excavation of twenty-eight test pits (Pits 1 to 27 and 16A) using a 15 tonne tracked excavator with a 600 mm bucket to depths of between 0.6 m to 3.5 m below ground level (m bgl);
- Collection of 75 primary soil samples (*i.e.* one to four samples collected per test pit). Soil samples were collected at regular intervals, change in strata or indications of potential contamination. Each soil sample included one soil jar and one 40 g plastic bag for asbestos analysis (asbestos identification only);

- Collection of two material samples from test pit spoil (M1 and M4) and two material samples collected from the ground surface (M2 and M3) that were all suspected asbestos containing materials (ACM) (refer to Drawing 1 for surface locations);
- Collection and field testing of replicate samples using a calibrated photo-ionisation detector (PID), in the field, of all soil samples collected;
- Laboratory analysis of 34 primary soil samples for a range of the following contaminants of potential concern (CoPC):
  - Metals/metalloids (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
  - Polycyclic aromatic hydrocarbons (PAH);
  - Total recoverable hydrocarbons (TRH);
  - Benzene, toluene, ethylbenzene and xylene (BTEX);
  - Phenols;
  - Organochlorine pesticides (OCP) and organophosphorus pesticides (OPP);
  - Polychlorinated biphenyls (PCB); and
  - Asbestos (identification only).
- Laboratory analysis of two samples for pH and CEC for the purposes of determining site-specific ecological investigation levels (EILs);
- Field sampling included a quality assurance/quality control (QA/QC) plan consisting of a minimum of 10% replicate sampling and laboratory analysis, trip blank, trip spike, and appropriate chain of custody procedures and internal laboratory QA/QC testing;
- Development of a preliminary conceptual site model (CSM); and
- Provision of this report detailing the methodology and results of the limited intrusive investigation and providing comment on: identifying observed potential sources of contamination and associated potential contaminants; the compatibility of the site for the proposed development; and recommendations for further works if considered necessary.

The site history information suggests that the site was used for agricultural purposes (pastoral land) from between 1916 to 1952. From between 1952 and 1972, the site was owned by the Snowy Mountains Hydro-Electric Authority (SMHEA) until the land become Crown Land between 1972 to 1994. Residential structures were noted in the aerial photograph from 1964. The aerial photograph from 1979 indicates that the residential structures were removed sometime between 1964 and 1979, possibly after the land had been transferred to be Crown Land. From between 1994 to 2006, the land was owned by the Minister for Education until the land was transferred to the current owner in 2006 to the Minister Administrating the Sporting Venues Management Act 2002. The aerial photograph from 1992 suggests that sometime between 1988 and 1992, part of a golf course had been constructed on the site. The site still appears to be part of a golf course in the 2018 aerial photograph.

The following general sub-surface conditions are as followed:

- **TOPSOIL/TOPSOIL FILL:** to depths of 0.15 m to 0.3 m in all test pits, except Pits 2, 12, 16, 24 and 27. Remnant topsoil (very stiff low plasticity sandy clay) was encountered in Pit 23 between depths of 0.15 m to 0.3 m;

- **FILL:** from the ground surface to depths of 0.15 to 1.5 m in Pits 2, 5, 12, 16, 20, 23, 24, 26 and 27; Pit 24 refused in this stratum at a depth of 1.5 m;

- **NATURAL SOILS:** from depths of 0.15 m to 1.5 m in Pits 1, 4, 7, 8, 10 to 13, 15, 16, 18, 19, 21 to 23, 25 and 16A; Pit 16 terminated in this stratum at the limit of investigation depth of 1.5 m.

- **INTRUSIVE VOLCANICS:** from depths of 0.2 m to 1.5 m to the termination depths of 0.6 m – 3.6 m in all the test pits except Pits 16 and 24.

The anthropogenic items and building debris observed in the fill at Pits 2, 16, 24, 25 and 26 included steel reinforced concrete, fragments of concrete, brick, terracotta pipe, terracotta pots, glass, asphalt and timber.

Potential asbestos containing materials were observed in fill at Pits 25 (collected as M1) and 26 (collected as M4) and on the surface in the south-eastern portion of the site (collected as M2 and M3). These locations are shown on Drawing 1, Appendix A. The material samples were submitted to the analytical laboratory for asbestos identification in materials in order to confirm the presence or absence of asbestos.

The results of the PID screening indicated that the sub-surface conditions were generally absent of volatile organic compounds (VOC) with all recorded values less than 1 ppm.

Perched groundwater was observed in Pit 20 at 2.2 m depth. No free groundwater was observed during the site investigation in all other test pits.

The analytical results for all contaminants tested in all samples were below the SAC with the exception of:

- Zinc in sample Pit 25/0.1 m at 550 mg/kg which exceeded the EIL of 500 mg/kg. While this is a marginal exceedance of the adopted SAC, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation be undertaken at and near this location. It is further noted that the current data set is not sufficient to undertake statistical analysis;
- Chlordane in sample Pit 23/0.1 m at 65 mg/kg which exceeded the HIL-A of 50 mg/kg. While this is a marginal exceedance of the adopted SAC, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation be undertaken at and near this location. It is further noted that the current data set is not sufficient to undertake statistical analysis;
- Chrysotile asbestos and Amosite asbestos were identified in material sample M1 taken from fill encountered in Pit 25; and
- Chrysotile asbestos, Amosite asbestos and Crocidolite asbestos were identified in material sample M2 taken from site surface in the south-eastern portion of the site near to Pit 25.

While both of the reported chemical exceedances of the adopted SAC are marginal, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation should be undertaken on these identified areas and other areas of the site with the same potential sources of contamination that have not yet been intrusively investigated.

Based on the identified presence of fragments of asbestos containing material in the area of former residential development in the south eastern portion of the site, it is considered appropriate that further asbestos investigation should be undertaken in this area.

However, based on the results of the PSI-L, it is considered that the site can be made suitable for the proposed school development subject to recommended further investigation, subsequent further data analysis and subsequent remediation or management if considered necessary based on the findings of the further investigation.

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Report on Preliminary Site Investigation (Contamination) with Limited Sampling
Jindabyne Central School
Part Lot 101, DP1019527, Jindabyne

1. Introduction

This Preliminary Site Investigation (Contamination) with Limited Sampling (PSI-L) conducted by Douglas Partners Pty Ltd (DP) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD No 15788005). The SSDA is for a new education campus at Jindabyne, comprising of a new primary and high school, located at the Jindabyne Sport and Recreation Centre (JSRC).

This report addresses the Secretary's Environmental Assessment Requirements (SEARs), notably:

- Key Issue 19 – Contamination:
    - Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority:
        - PSI-L (contamination).

2. Proposed Development

The proposed development is for the construction of the Jindabyne Education Campus comprising a new primary school and a new high school at Jindabyne (the proposal). The proposal is located within the JSRC located at 207 Barry Way (the site) and will accommodate approximately 925 students with the capacity for expansion in the future.

The new primary school will be located generally in the northern portion of the site whilst the new high school will be to the south of the site. While the schools are inherently separate identities, with separate student entries, opportunities for integration are provided in a central shared plaza with co-located school administration facilities, as identified in Figure 1 below. This outdoor learning space is activated by the school canteen (shared) and separate core facilities including the primary school hall and library, and the high school gym and library, and provides opportunities for shared community use.

The new primary school will provide for a Core 21 school. This will comprise of 20 home base units and 2 support learning units, administration and staff facilities, covered outdoor learning area (COLA), hall, staff and student amenities, out of school care facilities, library and special programs. Landscaped areas include active and passive open space play areas, and a games court.

The new high school will provide for a stream 2 high school. This is to comprise of 20 general/specialised learning spaces and support learning units, administration and staff facilities, covered outdoor learning

area (COLA), hall, staff and student amenities, library, an agricultural learning unit. Landscaped areas include active and passive open space play areas, a sports field and multipurpose games courts.

A new access driveway is proposed off Barry way Road along the western boundary of the site and includes car parking, bus and private vehicle drop-off zones, and delivery zones.

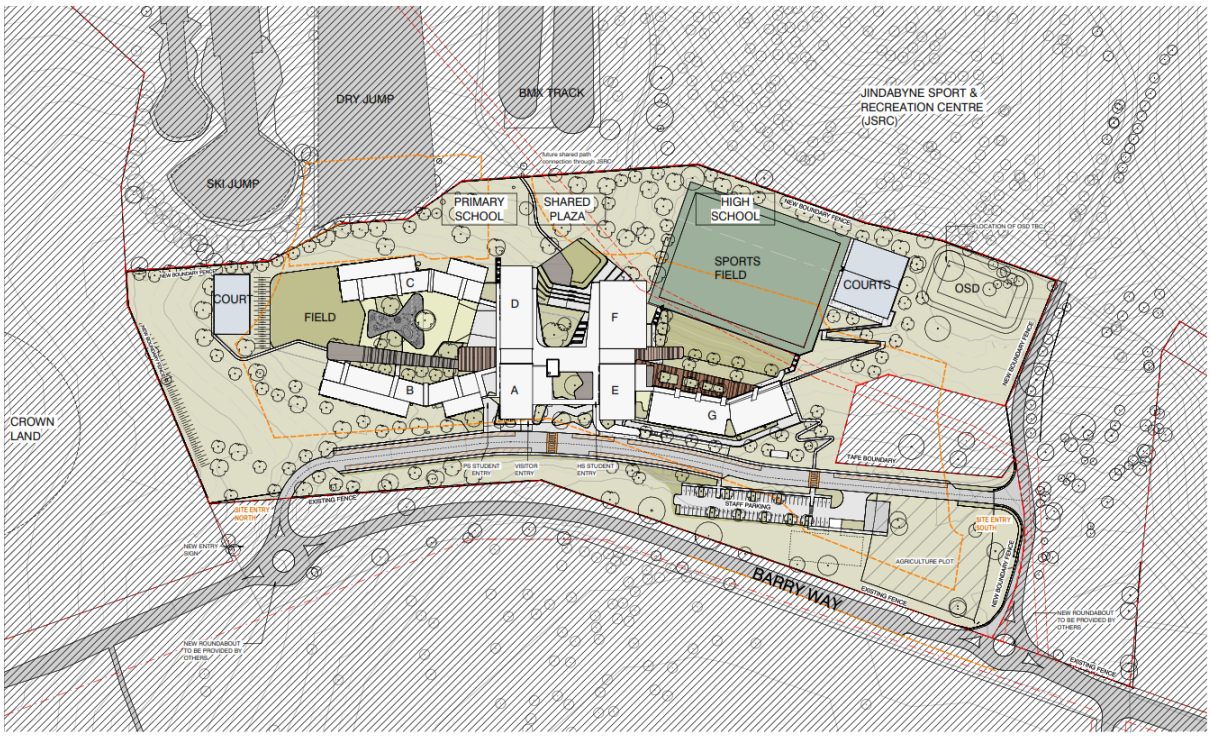

Figure 1 Proposed Site Plan
Source: DJRD

3. Site Information and Description

3.1 Site Identification

Site Address	207 Barry Way, Jindabyne
Legal Description	Part of Lot 101 Deposited Plan 1019527
Area	9.5 ha
Zoning	Zone RU1 Primary Production
Local Council Area	Snowy Monaro Regional Council
Current Use	Vacant (part of a former golf course) and residential land

Surrounding Uses	North – Agriculture East – Vacant and recreational South – Agriculture West – Agriculture/Airport

3.2 Site Description

The site of the proposed new education campus at Jindabyne is located within the western extent of the existing JSRC at 207 Barry Way (101 DP1019527). The site is located within the Snowy Monaro Regional Council local government area and is approximately 2.2km south of the Jindabyne town Centre. A site aerial is provided in Figure 2.

The site is approximately 9 ha in size, containing a former golf course and three existing workers cottages which were occupied during the construction of the Snowy Hydro Scheme. The majority of the site is undeveloped and contains maintained grasslands and scattered trees. Much of the surrounding land comprises remnant grassland, woodland and agricultural land.

As identified above, the site is within the existing JSRC which is a high performance and community sport centre located directly east of the site. The JSRC has a range of sporting facilities including a synthetic running track, cycling track, netball and tennis courts, fitness and indoor sports centres, and sporting ovals, as well as other services and accommodation facilities. The newly constructed BMX track is located directly east of the site with the new ski jump currently under construction to the northeast.

TAFE NSW have recently lodged a development application for a Connected Learning Centre (CLC) and Mobile Training Unit (MTU) which is proposed to the south of the site. The CLC and MTU will utilise interactive, digitally enabled, flexible, and multipurposed learning environments to provide high-quality training and learning experiences accommodating a maximum of 20-25 students and three teachers.

The surrounding locality is generally rural in character with other land uses also including the Jindabyne Aero Club located to the west of the site on Tinworth Drive, an industrial area to the southwest and the Jindabyne Community recycling centre is located east of the JSRC.

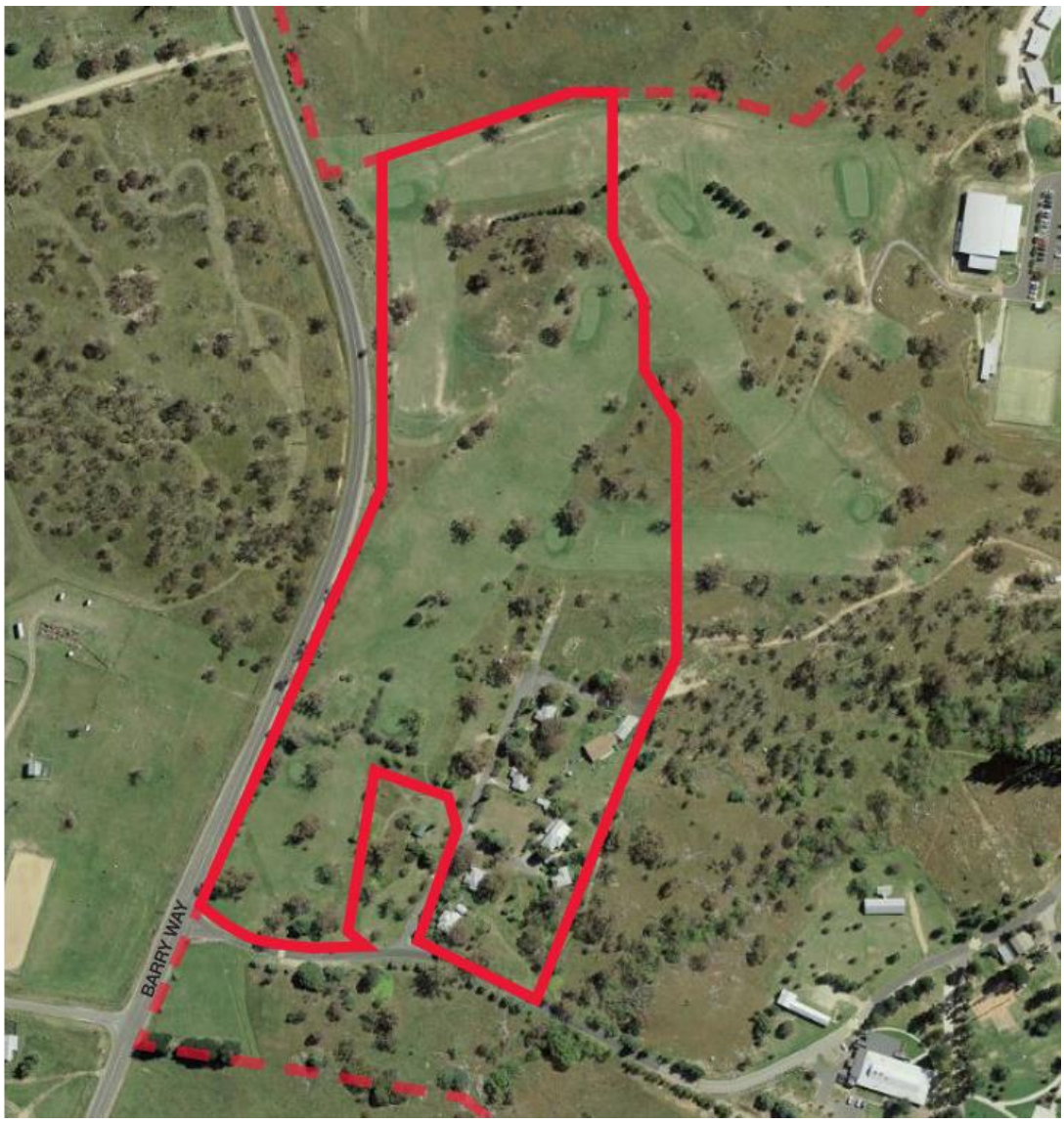

Figure 2: Site aerial - new education campus within the Jindabyne Sport and Recreation Centre.
Source: DJRD

4. General

DP has been engaged by Colliers on behalf of NSW Department of Education - School Infrastructure NSW (SINSW) to revise the previous preliminary site investigation and limited intrusive investigation undertaken for a new primary and high school in Jindabyne for the site at Part Lot 101, DP1019527, Jindabyne (hereinafter referred to as 'the site'). It is understood that a portion of the southern end of the site has now been excluded from the site investigation (see Figure 2). It should be noted that the information contained in Sections 1 – 3 of this report has been provided by the client as a Pro-Forma and DP has been required to reproduce these paragraphs in this report. The site location and site features are shown on Drawing 1, test locations are shown on Drawing 2 and a survey plan, provided

by the client is shown on Drawing 3, Appendix A. DP considered it appropriate to consolidate both previous reports into the one revised report.

The objective of the PSI-L was to identify potential sources of contamination and determine the potential contaminants of concern, identify areas of potential contamination, identify human and ecological receptors associated with the proposed development and identify potentially affected media (soil, groundwater, ground gas etc.).

The investigation was undertaken in general accordance with DP's proposal CAN200329.P.001.Rev0 dated 9 October 2020 and acceptance received from Christine Yorkston dated 06 November 2020 and subsequent variations dated 23 March 2021 and 25 August 2021, and acceptance received from Neil Hogan dated 30 March 2021 and David Carey 17 September 2021, respectively. This report must be read in conjunction with all appendices including the notes provided in Appendix B.

5. Scope of Work

The PSI-L included the following scope of works:

- Preparation of a list of Potential Areas of Environmental Concern (PAEC) through investigation of the site by the following methods:
    - Review of local topographic, soil, geological, salinity and acid sulfate soils mapping;
    - Review of available historical aerial photography for the site to identify land uses and changes in the land that may indicate a potential for contamination;
    - Search of the NSW EPA contaminated land records to determine the existence of statutory notices current on any parts of the site, or adjacent land, under the Contaminated Land Management Act (1997) and licences (if any) under the Protection of the Environment Operations Act (1997);
    - Search through the dangerous goods database held by SafeWork NSW;
    - NSW Office of Water groundwater bore search;
    - Summary of current and historic titles and Deposited Plans to identify previous owners that may indicate potentially contaminating activities that may have occurred on site; and
    - Review of readily available Council records and Section 10.7 (formerly Section 149) certificate.
- Excavation of twenty-eight test pits (Pits 1 to 27 and 16A) using a 15 tonne tracked excavator with a 600 mm bucket to depths of between 0.6 m to 3.5 m below ground level (m bgl);
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- Collection and field testing of replicate samples using a calibrated photo-ionisation detector (PID), in the field, of all soil samples collected;

- Laboratory analysis of 34 primary soil samples for a range of the following contaminants of potential concern (CoPC):
  - Metals/metalloids (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
  - Polycyclic aromatic hydrocarbons (PAH);
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  - Phenols;
  - Organochlorine pesticides (OCP) and organophosphorus pesticides (OPP);
  - Polychlorinated biphenyls (PCB); and
  - Asbestos (identification only).
- Laboratory analysis of two samples for pH and CEC for the purposes of determining site-specific ecological investigation levels (EILs);
- Field sampling included a quality assurance/quality control (QA/QC) plan consisting of a minimum of 10% replicate sampling and laboratory analysis, trip blank, trip spike, and appropriate chain of custody procedures and internal laboratory QA/QC testing. It should be noted that discussion of QA/QC decisions are provided in Appendix L;
- Development of a preliminary conceptual site model (CSM); and
- Provision of this report detailing the methodology and results of the limited intrusive investigation and providing comment on: identifying observed potential sources of contamination and associated potential contaminants; the compatibility of the site for the proposed development; and recommendations for further works if considered necessary.

6. Environmental Setting

Regional Topography	The area is surrounded by undulating hills to the west and south and Lake Jindabyne and the Snowy River/Snowy River valley are located to the north and east, respectively. Further west and north, steep mountains are located and slope towards the east. Further south and east, high plains are located in the region. The area generally slopes west to east, towards Lake Jindabyne/Snowy River.
Site Topography	The site is undulating with an overall moderate slope from the western boundary of the site at an approximate height of 1004 m Australian Height Datum (AHD) towards the eastern boundary of the site at an approximate height of 985 m AHD.
Soil Landscape	NA – A search was conducted through the NSW Government eSpade website (https://www.environment.nsw.gov.au/eSpade2WebApp) and eSpade indicated that there is no data for soil landscapes within the site.
Geology	GS NSW (1976) indicates that the site is underlain by the Kosciusko Batholith which comprises granodiorite. Two types of intrusive igneous rock are mapped within the site. The south-western corner of the site is mapped as Leesville Granodiorite and the remaining portion of the site is

	mapped as Jindabyne Tonalite. Fieldwork observations confirmed the presence of intrusive igneous rock across the site (see Section 12.1 and Figure 3 below for further detail). .
Acid Sulfate Soils	Reference to the CSIRO's Atlas of Australian Acid Sulfate Soils online mapping portal, (A S R I S - Atlas of Australian Acid Sulfate Soils (csiro.au)) indicates the site has no known occurrence of acid sulfate soil/extremely low probability of occurrence.
Surface Water	Lees Creek approximately 40 m east at the site's nearest point. Lees Creek flows into Lake Jindabyne approximately 1.1 km from the nearest point of the site.
Groundwater	Anticipated groundwater flow direction is inferred to be towards the east to north-east towards Lees Creek and Lake Jindabyne. A search of the publicly available registered groundwater bore database indicated that there are no registered groundwater bores within 1 km of the site.

An extract of the GS NSW map showing the indicated geological units is shown below in Figure 3.

The field investigation has confirmed the presence of granodiorite and tonalite underlying the site.

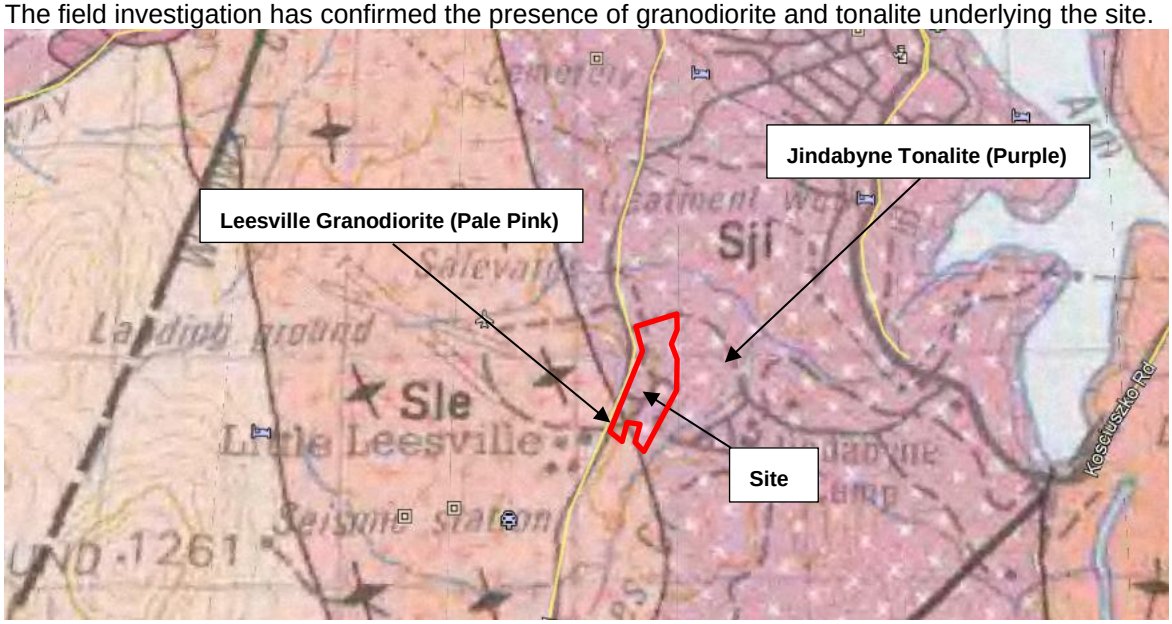


Figure 3: Extract from Geology Map

7. Site History

7.1 Title Deeds

A historical title deeds search was used to obtain ownership and occupancy information including company names and the occupations of individuals. The title information can assist in the identification

of previous land uses by the company names or the site owners and can, therefore, assist in establishing whether there were potentially contaminating activities occurring at the site. A summary of the title deeds and possible land uses (with reference to the aerial photographs and other historical searches) are presented in Table 1 – 4 and provided in Appendix C.

Table 1: Historical Title Deeds – As regards the parts numbered (1) and (2) on the attached extract of D.P. 239506 (The southern half of Part 2 is presently the site of investigation)

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations	Inferred Land Use
15.02.1916 (1916 to 1952)	William Weston (Grazier)	Agricultural (likely pastoral)
04.02.1952 (1952 to 1972)	Snowy Mountains Hydro-Electric Authority	Unknown – possible residential land use (1962 Aerial Photograph)

Table 2: Historical Title Deeds – As regards the part numbered (3) on the attached extract of D.P. 239506

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations	Inferred Land Use
07.04.1922 (1922 to 1924)	John Inman McGufficke (Grazier)	Agricultural (likely pastoral)
07.07.1924 (1924 to 1951)	Herbert Norman McGufficke (Grazier)	Agricultural (likely pastoral)
22.11.1951 (1951 to 1972)	Snowy Mountains Hydro-Electric Authority	Unknown

Table 3: Historical Title Deeds As regards the part numbered (4) on the attached extract of D.P. 239506

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations	Inferred Land Use
	This part was formerly a Crown Road subsequently closed	Transport
16.03.1966 (1966 to 1972)	Snowy Mountains Hydro-Electric Authority	Unknown

Table 4: Historical Title Deeds - Continued as regards the whole of the subject land

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations	Inferred Land Use
10.05.1972 (1972 to 1994)	Her Most Gracious Majesty Queen Elizabeth the Second	Unknown

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations	Inferred Land Use
09.02.1994 (1994 to 2006)	Minister for Education	Recreational
21.12.2006 (2006 to date)	# Minister Administering the Sporting Venues Management Act 2002	Recreational

# Denotes Current Registered Proprietor

7.2 Historical Aerial Photography

Five historical aerial photographs (D1 – D5) were obtained from public databases and three satellite images (D6 – D8) were obtained from Google Earth Pro. Extracts of the aerial photographs and satellite images are included in Appendix D. A summary of key features observed for the site and surrounding land is presented in Table 5.

Table 5: Summary of Historical Aerial Photographs

Year	Site	Surrounding Land Use
1962	A number of residential properties were located within the south-eastern portion of the site. A number of unsealed roads were located throughout the site. Two roads were located through the middle of the site and the other road was located within the northern portion of the site. Sporadic trees and grassed areas were located throughout the remaining areas of the site.	Barry Way was located along the western boundary of the site with moderately densely populated trees, possible grazing land and an airstrip. Moderately densely populated trees, possible grazing land and unsealed roads were present north of the site. Lees Creek was located east of the site and the development of the Jindabyne Sport and Recreation Centre was underway further east of Lees Creek. Open space, used as possible grazing land and part of Lees Creek was located south of the site. A small number of residential dwellings were located directly south of the site.
1979	The residential properties appeared to have been demolished/removed west of the access road within the site. The unsealed roads within the middle of the site also appeared to have been removed or overgrown. Some additional trees had been planted across the southern portion of the site. And	The houses located to the south of the site appeared to have been demolished. The construction of the Jindabyne Sport and Recreation Centre had been completed.

Year	Site	Surrounding Land Use
	tree removal appeared to have occurred within the northern section of the site.	Small buildings were undergoing development to the north-east of the site.
1988	The site had been developed into a golf course/club with various tee-off points, fairways and greens.	Some small buildings were developed to the north-east of the site, possibly for the golf club/course. To the west of the site, the airstrip had undergone some further development/expansion. Further south-west of the site, the development for a small industrial estate was underway.
1992	Largely unchanged from the previous photograph.	A tennis court was constructed north-east of the site. Development of the industrial estate to the south-west of the site was continuing.
1998	Largely unchanged from the previous photograph.	Additional buildings and tennis courts were constructed to the north-east of the site. The Jindabyne Sport and Recreation Centre was undergoing some redevelopment works.
2003	Largely unchanged from the previous photograph.	The Jindabyne Sport and Recreation Centre redevelopment works were completed.
2013	Largely unchanged from the previous photograph. Several residential developments within the south-eastern portion of the site appeared to have been demolished.	Additional small buildings had been constructed to the north-east of the site. Small structures/possible hangers appeared to have been constructed at the Jindabyne Aeroclub.
2018	Largely unchanged from the previous photograph. Additional dwellings within the south-eastern portion of the site appeared to have been demolished.	Additional structures within the Jindabyne Sport and Recreation Centre had been constructed.

7.3 Public Registers and Planning Records

EPA (or equivalent) Notices – Provided in Appendix C	No Notices for the site or any site within 1 km; accessed 21/07/2021

EPA (or equivalent) Licences	No Notices for the site or any site within 1 km; accessed 21/07/2021
SafeWork NSW (or equivalent) Provided in Appendix C	A signed authority to conduct information search was returned to DP on 23 of September 2021 and DP requested the search for Schedule 11 Hazardous Chemicals at Hazardous Substances for the broader site on the same day. SafeWork NSW returned the search results on 27 October 2021 and the results of the search include the following: • The most recent licence for the site was dated 5 September 2003 and indicated that there are three above ground LPG tanks (ranging from 1000 – 6000 L in size), one underground petrol storage tank (UST) (5000 L in size) and one roof storage area with 200 L of petrol and 20 L of turpentine; • Mud maps/site sketches for the 2003 license indicate approximate tank/fuel locations (see Appendix C and Drawing 1, Appendix A). Ms Jeni Hamilton, an employee of the JSRC indicated that all USTs on site have been removed 'years' ago; • The USTs were located within the recreational facility approximately 300 – 400 m east and down gradient of the proposed school site; • Several licenses dating back to 1972, 1981, 1986 and 1989 indicated that there were other LPG and USTs located within the site (see Appendix C), however the locations of these tanks are unknown; and • A pistol club was located 300 m east and down gradient of the proposed school site. It should be noted that the sketch of "Area 4" was not scanned properly (i.e. only the left hand corner of the page was scanned). DP have requested that SafeWork NSW amend the scanned page for the "Area 4" sketch. DP have not received a response from SafeWork NSW at the time of writing this revised PSI-L. Ms Hamilton noted that the second UST was located at the JSRC reception/head office/kiosk.
Planning Certificate(s) – Provided in Appendix C	The land has not been assessed for the likelihood of contamination by Council considering past uses or results of systematic sampling. The site is not considered critical habitat, is not located in a conservation area nor contains registered heritage items. The site is not located in a mine subsidence or road widening/construction area. The site is not located in a naturally occurring asbestos (NOA) hazard/risk area. The site is located in a bushfire hazard/risk area. The site is not subject to flood related development controls. The site is not located in bio-diversity certified land. The site is not reported to contain loose fill asbestos.

	The site is not/has not been identified as contaminated land as per the Contaminated Land Management Act 1997 or Environmental Planning and Assessment Act 1979 (EP&A Act).
Council Records	No relevant records

7.4 Underground Services

A Dial Before You Dig (DBYD) search was conducted and a certified service locator was engaged for work health and safety reasons before intrusive works begun on-site. The JSRC staff were also able to provide DP with a number of water, sewer and electrical plans. All DBYD and JSRC provided plans are included in Appendix C. It should be note a small number of plans could not be included in Appendix C, due to the files being protected.

Underground service lines have the potential to allow migration of contaminants off-site and some historical underground services may contain ACM (i.e. electrical, telecommunication, stormwater conduits, etc.). The services within or at the boundary of the site were noted as follows:

- Water/Irrigation;
  - Located along part of the eastern boundary, one through the middle of the site (stops at approximately in the central portion of the site) and within the south-eastern portion of the site, serving the existing houses on-site. The water lines predominantly run in a south to north orientation. One of the plans indicates that the water services comprise of 100 mm poly-pipe and;
  - Irrigation service lines were not highlighted on any DBYD or JSRC plans, however, during the walkover, evidence of irrigation lines were observed sporadically across the site. Where these lines were noted, it appeared they were constructed of either metal or poly-pipe.
- Sewer;
  - A sewer main is located through the south-east portion of the site and runs in a south to north orientation. The sewer line then deviates to the north-east, out of the site. The deviation occurs at the end of the asphalted access road.
- Electricity:
  - An electrical service line is located along the eastern side of the access road, running in a south to north orientation and turns east at the end of the access road and runs through the centre of the site in an east to west orientation. Several electrical lines are also present in the south-east portion of the site, servicing the existing dwellings;
- Telecommunications;
  - Telecommunication and internet lines (NBN and Telstra) are aligned along the western boundary of the site in a north to south orientation and run through middle section of the site in an east to west orientation. Telecommunication lines are also located along the western side of the access road and appear to terminate at the end of the access road.

Although plans did not indicate the presence of ACM-containing conduits, DP cannot guarantee that these services and other unknown services do not contain ACM.

7.5 Site History Integrity Assessment

The information used to establish the history of the site was sourced from reputable and reliable reference documents, many of which were official records held by Government departments/agencies. The databases maintained by various Government agencies potentially can contain high quality information, but some of these do not contain any data at all.

In particular, aerial photographs provide high quality information that is generally independent of memory or documentation. They are only available at intervals of several years, so some gaps exist in the information from this source. The observed site features are open to different interpretations and can be affected by the time of day and/or year at which they were taken, as well as specific events, such as flooding. Care has been taken to consider different possible interpretations of aerial photographs and to consider them in conjunction with other lines of evidence.

7.6 Summary of Site History

The site history information suggests that the site was used for agricultural purposes (pastoral land) from between 1916 to 1952. From between 1952 and 1972, the site was owned by the Snowy Mountains Hydro-Electric Authority (SMHEA) until the land become Crown Land between 1972 to 1994. Residential structures were noted in the aerial photograph from 1964. The aerial photograph from 1979 indicates that the residential structures were removed sometime between 1964 and 1979, possibly after the land had been transferred to be Crown Land. From between 1994 to 2006, the land was owned by the Minister for Education until the land was transferred to the current owner in 2006 to the Minister Administrating the Sporting Venues Management Act 2002. The aerial photograph from 1992 suggests that sometime between 1988 and 1992, part of a golf course had been constructed on the site. The site still appears to be part of a golf course in the 2018 aerial photograph. The SafeWork search indicates that the most recent hazardous substance license there is one UST and one area of above ground fuel storage approximately 400 m east and downgradient of the site as well as above ground LPG tanks. Given that the storage areas are down gradient of the site and the distance from the site, it is unlikely that the fuel storage and gas storage would affect the site.

8. Site Walkover

A site walkover was undertaken by an environmental scientist on 19 January 2021 and 22 April 2021. The general site topography was consistent with that described in Section 6. The following key site features pertinent to the PSI-L were observed (refer to photographs in Appendix E).

- The site comprised part of a former golf course, during the walkover, it appeared that the golf course was no longer in use. The site was moderately to heavily grassed with overgrown weeds and sporadic clumps of mature trees located across the site;
- A small storage shed was located just outside of the site where the CLC is proposed to be located. The storage shed was in good condition and appeared to have been recently constructed. At the time of the walkover, the shed was inaccessible. There were no obvious signs of chemical or fuel storage around the storage shed;

- Shallow rock and some rock outcropping were present across the southern half of the site and a rocky knob was located within the central northern portion of the site. The rock appeared to be moderately to slightly weathered granodiorite/tonalite. Along the central eastern boundary and central northern portion of the site, some surface rock was observed. The surface rock also appeared to be moderately weathered granodiorite/tonalite;
- Five small areas of sand and remnant topsoil were noted across the site. It is likely that they were once greens from the previous golf course;
- A potential fill pad or potential site cut was noted south of the storage shed, along the eastern portion of the site;
- Five fill pads were noted across the site. The fill pads appeared to be remnant tee-off points and greens from the former golf course;
- Potential surface fill was noted across the central eastern portion of the site;
- Services were noted across the site including water and irrigation services and communication services. The service trenches have to potential to contain uncontrolled/undocumented fill;
- Two concrete blocks were noted within the ground along the eastern boundary. The blocks were potentially old foundations from the previous residential dwellings noted in the 1962 Aerial Photograph;
- Sporadic inert waste was observed across the site. The waste included fragments of PVC pipe, concrete fragments, minor amounts of brick and plastic food packaging;
- An unsealed track was present through the northern portion of the site. The unsealed track was a haulage road for machinery and trucks for the construction of a BMX track north of the site;
- Part of a ski-jump construction site is located within the central northern portion of the site. The construction site comprised a number of large spoil stockpiles from excavations north-east of the site. The spoil comprises of residual clay and rock of varying degrees of weathering. The spoil was in the process of being sorted for the filling of the ski-jump;
- The south-eastern portion of the site comprised an undulating area that had an overall slope from the west, down towards the east. Several existing residential properties were noted across the area. Underground services were also present in this area;
- The Jindabyne Aeroclub was noted to be located approximately 950 m to the west of the site. Civilian airports have been known to use per- and poly-fluoroalkyl substances (PFAS). It is not known if the Jindabyne Aeroclub have used PFAS in the past although it should be noted that the structures and possible hangers located within the Aeroclub were constructed sometime between 2003 and 2013 and in 2003 to 2004 Airservices Australia and the Australian Defence Force started phasing out the use of PFAS. It is unlikely PFAS has been used/stored within the Jindabyne Aeroclub. DP also notes that potential underground fuel storage may also be present within the Aeroclub site. DP notes that it is likely that surface water and groundwater flow would follow the topography of the area. The overall slope of the Jindabyne Aeroclub is to the north-east and is cross-gradient to the site, the slope follows an unnamed tributary that eventually conjoins Lees Creek, north of the site of investigation.
- No evidence of staining or odorous soils was noted during the site inspection;
- No evidence of underground fuel storage tanks or above fuel storage tanks were noted during the site inspection; and

- Two potential asbestos containing material (PACM) fragments were noted during the site walkover within the south-eastern portion of the site. It is noted that DP's scope did not include a hazardous building materials assessment.

It should be noted that due to the dense vegetation across the site, observations of potential fill, hazardous building materials and stained soils was limited during the walkover.

9. Preliminary Conceptual Site Model

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

Potential Sources

Based on the findings of the site history searches and site walkover, the following potential sources of contamination and associated contaminants of potential concern (CoPC) have been identified.

- S1: Fill: Associated with levelling and development of the golf course, demolition of former residential dwellings on the site and former unsealed roads that were present on the site.
  - CoPC includes metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), organophosphate pesticides (OPP), phenols and asbestos.
- S2: Former residential dwellings and underground services dating back to the 1960's
  - CoPC include asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB.
- S3: Application of pesticides, herbicides and fungicides to the golf course.
  - CoPC include metals, OCP/OPP, herbicides and fungicides.

Potential Receptors

The following potential human receptors have been identified:

- R1: Current site users [recreational];
- R2: Future construction and maintenance workers;
- R3: End users [school – students, teachers and other school employees]; and
- R4: Adjacent site users [recreational and agricultural].

The following potential environmental receptors have been identified:

- R5: Surface water [Lees Creek – Fresh Water];
- R6: Groundwater; and

- R7: Terrestrial ecology.

Potential Pathways

The following potential pathways have been identified:

- P1: Ingestion and dermal contact;
- P2: Inhalation of dust and/or vapours;
- P3: Surface water run-off;
- P4: Lateral migration of groundwater providing base flow to water bodies;
- P5: Leaching of contaminants and vertical migration into groundwater; and
- P6: Contact with terrestrial ecology.

Summary of Potentially Complete Exposure Pathways

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S3) and receptors (R1 to R7) are provided in Table 6.

Table 6: Summary of Potentially Complete Exposure Pathways

Source and CoPC	Transport Pathway	Receptor	Risk Management Action
S1: Undocumented/uncontrolled fill, Metals, TRH, BTEX, PAH, OCP and asbestos	P1 and P2	R1, R2 and R3	Fill was present across the site. During the site walkover, surface fill, fill pads and potential surface fill and fill pads were observed at various locations within the site (refer to Drawing 1). An intrusive investigation is recommended to assess possible contamination including testing of the soils and groundwater.
	P2	R4	
	P3 and P5	R5	
	P4	R6	
	P6	R7	
S2: Former buildings and underground services, residual hazardous building material – asbestos, SMF, lead (in paint) and PCB	P1, P2 and P3	R1	Former residential dwellings were noted in *Aerial Photograph 1962* along the eastern boundary. Potential former concrete footing structures were also observed during the site walkover along the eastern boundary.
		R2	
		R3	
	P3, P4 and P5	R4	
	P3 and P4	R5	
	P4 and P5	R6	

Source and CoPC	Transport Pathway	Receptor	Risk Management Action
	P6	R7	An intrusive investigation is recommended to assess possible contamination including testing of the soils and groundwater.
S3: Past and Present golf course maintenance practices – pesticides, herbicides and fungicides	P1, P2 and P3	R1	The site forms part of a former golf course. During the site walkover, former tee-off areas and greens were observed across the site. It is likely that these areas were subjected to past golf course maintenance practices. An intrusive investigation is recommended to assess possible contamination including testing of the soils and groundwater.
		R2	
		R3	
	P3, P4 and P5	R4	
	P3 and P4	R5	
	P4 and P5	R6	
	P6	R7	

10. Sampling and Analysis Quality Plan

10.1 Data Quality Objectives

The PSI-L was devised with reference to the seven-step data quality objective process which is provided in Appendix B Schedule B2, NEPC (2013). The DQO process is outlined in Appendix F.

10.2 Soil Sampling Rationale

Based on the CSM and DQO, the following sampling rationale was adopted.

A limited targeted sampling strategy and opportunistic sampling from the concurrent geotechnical test pits was adopted. Locations were selected primarily to target areas of the proposed development for geotechnical purposes with concurrent sampling for contaminated land investigation purposes. Some targeting of the PAEC identified during the site history review was undertaken with the rationale provided below. Test pit locations are shown on Drawing 2, in Appendix A.

Pits 1 to 27 and 16A	Target areas of the proposed development for geotechnical purposes.
Pits 5, 7, 8, 22 and 25	In the vicinity of the existing and former buildings
Pits 2, 12, 16, 23, 24 and 26	Located on tees and greens of the golf course
Pit 20	Located in a potential in-filled gully line

Soil samples were collected for contaminated land investigation purposes from each test pit at depths of approximately 0.1 m, 0.5 m and 1.0 m and every 1.0 m or change of strata thereafter until 0.5 m into natural soils or rock or prior termination of the test pit.

The general sampling methods are described in the field work methodology, included in Appendix G.

11. Site Assessment Criteria

The site assessment criteria (SAC) applied in the current investigation are informed by the CSM (Section 9) which identified human receptors to potential contamination on the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The investigation and screening levels applied in the current investigation comprise levels adopted for the most sensitive land use setting for the site which is residential land use with garden/accessible soil and includes primary schools (Human Investigation/Screening Levels – HIL/HSL-A). DP considers that a HIL/HSL-A is appropriate for the entire site (i.e. including the high school area) because of the proposed agricultural plot (access to gardens) and it is not known whether primary school students will have access to high school areas or not. The derivation of the SAC is included in Appendix H and the adopted SAC are listed on the summary analytical results tables in Appendix K.

12. Results

12.1 Field Work Results

The test pit logs for this assessment are included in Appendix I. The logs recorded the following general sub-surface profile:

- **TOPSOIL/TOPSOIL FILL:** generally stiff to hard, low plasticity sandy clay and medium dense to dense clayey sand, with various amount of gravel and rootlets to depths of 0.15 m to 0.3 m in all test pits, except Pits 2, 12, 16, 24 and 27. Remnant topsoil (very stiff low plasticity sandy clay) was encountered in Pit 23 between depths of 0.15 m to 0.3 m;

- **FILL:** generally low plasticity to low – medium plasticity, stiff – very stiff to very stiff-hard sandy clay and/or loose to medium dense sandy soils, with various mixture of silt, sand, gravel, rootlets and cobbles, trace building debris, from the ground surface to depths of 0.15 to 1.5 m in Pits 2, 5, 12, 16, 20, 23, 24, 26 and 27; Pit 24 refused in this stratum at a depth of 1.5 m;

- **NATURAL SOILS:** generally low plasticity to medium – high plasticity, very stiff to hard sandy clay and/or medium dense to dense sandy soils with various mixtures of sand, gravel, trace cobbles and boulders from depths of 0.15 m to 1.5 m in Pits 1, 4, 7, 8, 10 to 13, 15, 16, 18, 19, 21 to 23, 25 and 16A; Pit 16 terminated in this stratum at the limit of investigation depth of 1.5 m.

- **INTRUSIVE VOLCANICS:** variably very low strength to high - very high strength, highly weathered to slightly weathered granodiorite/tonalite from depths of 0.2 m to 1.5 m to the termination depths of 0.6 m – 3.6 m in all the test pits except Pits 16 and 24.

The anthropogenic items and building debris observed in the fill at Pits 2, 16, 24, 25 and 26 included steel reinforced concrete, fragments of concrete, brick, terracotta pipe, terracotta pots, glass, asphalt and timber.

Potential asbestos containing materials were observed in fill at Pits 25 (collected as M1) and 26 (collected as M4) and on the surface in the south-eastern portion of the site (collected as M2 and M3). These locations are shown on Drawing 1, Appendix A. The material samples were submitted to the analytical laboratory for asbestos identification in materials in order to confirm the presence or absence of asbestos.

A photo-ionisation detector (PID) was used for screening replicate samples. The results of the PID screening indicated that the sub-surface conditions were generally absent of volatile organic compounds (VOC) with all recorded values less than 1 ppm. The results also indicate there is a low risk of hydrocarbon contamination on-site and migration from off-site locations.

Perched groundwater was observed in Pit 20 at 2.2 m depth and appeared to infiltrate the test pit from an up-gradient position, after 5 – 10 minutes (while continuing the test pit excavation), seepage of groundwater appeared to stop. The fill was unconsolidated with various amounts of cobbles and boulders, resulting in gaps within the fill matrix. It is thought that the perched groundwater is a result of surface run-off migrating through gaps in the fill and fractured area of rock. No free groundwater was observed during the site investigation in all other test pits. It is noted that the test pits were immediately backfilled following excavation which precluded longer term monitoring of groundwater level. Groundwater conditions rarely remain constant and can change seasonally due to variations in rainfall, temperature and soil permeability. For these reasons, it is noted that the moisture condition of the site soils may vary considerably from the time of the investigation compared to at the time of construction. It must be noted that due to the topography and fractured weathered rock, groundwater seepages must be expected following periods of rainfall.

It is unlikely that potential contaminants from adjacent sites have migrated to the site from groundwater as no free-flowing groundwater was observed during the intrusive investigation.

12.2 Laboratory Analytical Results

The results of soil laboratory analysis are summarised in the table in Appendix K:

The laboratory certificate(s) of analysis together with the chain of custody and sample receipt information are provided in Appendix J.

13. Discussion

13.1 Contamination Status of Soils

The analytical results for all contaminants tested in all samples were below the SAC with the exception of:

- Zinc in sample Pit 25/0.1 m at 550 mg/kg which exceeded the EIL of 500 mg/kg. While this is a marginal exceedance of the adopted SAC, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation be undertaken at and near this location. It is further noted that the current data set is not sufficient to undertake statistical analysis;
- Chlordane in sample Pit 23/0.1 m at 65 mg/kg which exceeded the HIL-A of 50 mg/kg. While this is a marginal exceedance of the adopted SAC, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation be undertaken at and near this location. It is further noted that the current data set is not sufficient to undertake statistical analysis;
- Samples Pit 20/0.5 m and Pit 20/1.0 m were collected in fill material overlying highly fractured to fractured tonalite and perched groundwater. The analytical results for all contaminants tested in all samples were below the SAC. It is considered that the perched groundwater would not be affected by the overlying fill material.
- The anthropogenic materials observed (see Section 12.1) are considered to be inert and non-hazardous from a chemical perspective. However, some anthropogenic material including glass, tiles and terracotta pipe have a potentially to physically harm future site workers and land users;
- Chrysotile asbestos and Amosite asbestos were identified in material sample M1 taken from fill encountered in Pit 25; and
- Chrysotile asbestos, Amosite asbestos and Crocidolite asbestos were identified in material sample M2 taken from site surface in the south-eastern portion of the site near to Pit 25.

13.2 Data Quality Assurance and Quality Control

The data quality assurance and quality control (QA/QC) results are included in Appendix L. Discussion of QA/QC decisions are also provided in Appendix L. Based on the results of the field QA and field and laboratory QC, and evaluation against the data quality indicators (DQI) it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

13.3 Conceptual Site Model

Based on the findings of this PSI-L, it is considered the Preliminary CSM provided in Section 9 is still appropriate. However, at this stage of the investigation, groundwater has only been observed as being perched and the fill located above the perched groundwater showed no signs of contamination and chemical analysis indicated that all contaminants of concern were below the HIL/HSL-A criteria. DP considers that a groundwater investigation is not necessary at this stage.

14. Conclusions and Recommendations

While both of the reported chemical exceedances of the adopted SAC are marginal, given the limited nature of the PSI-L undertaken to date, it is considered appropriate that further intrusive investigation

should be undertaken on these identified areas and other areas of the site with the same potential sources of contamination that have not yet been intrusively investigated.

Based on the identified presence of fragments of asbestos containing material in the area of former residential development in the south eastern portion of the site, it is considered appropriate that further asbestos investigation should be undertaken in this area.

However, based on the results of the PSI-L, it is considered that the site can be made suitable for the proposed school development subject to recommended further investigation, subsequent further data analysis and subsequent remediation or management if considered necessary based on the findings of the further investigation. Care should be taken when handling material (during future site investigations and developments) with glass and other potential sharp objects and where practical, anthropogenic materials should be segregated from soil material. Furthermore, when handling material with potentially sharp objects, correct PPE should be worn, or machines should be used when handling material affected by sharp anthropogenic objects.

15. References

CRC CARE. (2017). *Risk-based Management and Remediation Guidance for Benzo(a)pyrene.* Technical Report no. 39: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

NSW EPA. (1995). *Contaminated Sites, Sampling Design Guidelines.* NSW Environment Protection Authority.

NSW EPA. (2020). *Guidelines for Consultants Reporting on Contaminated Land.* Contaminated Land Guidelines: NSW Environment Protection Authority.

16. Limitations

Douglas Partners (DP) has prepared this report for this project at Part of Lot 101 DP 1019725, Jindabyne in accordance with DP's proposal dated 9 October 2020 and acceptance received from Christine Yorkston dated 06 November 2020 and subsequent variations dated 23 March 2021 and 25 August 2021, and acceptance received from Neil Hogan dated 30 March 2021 and David Carey 17 September 2021, respectively. The work was carried out under contract ID SINSW01290/20, dated 6 November 2020. This report is provided for the exclusive use of NSW Department of Education - School Infrastructure NSW for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any

loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

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

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

The assessment of atypical safety hazards arising from this advice is restricted to the environmental components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

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

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

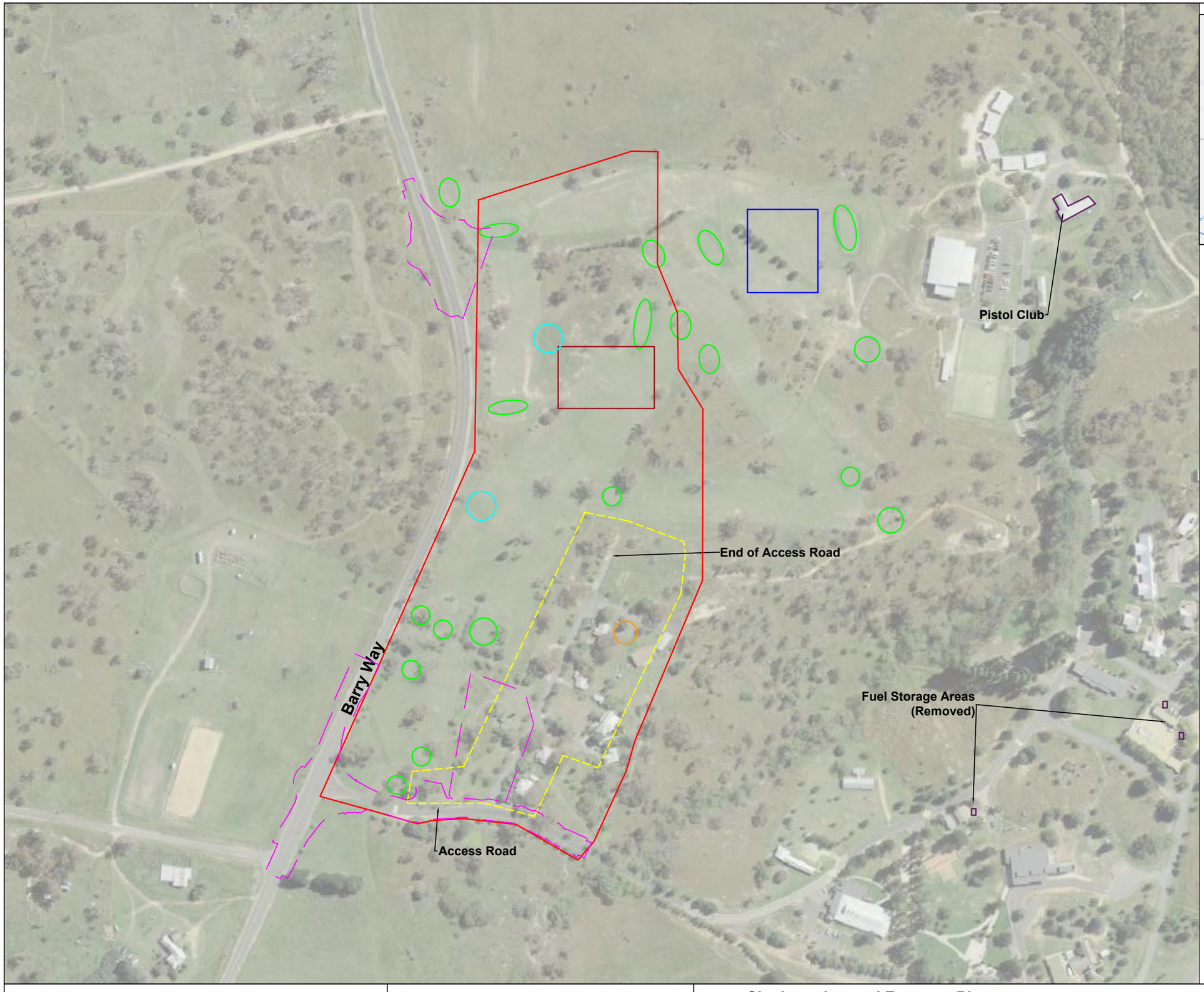
Asbestos has been detected by observation and by laboratory analysis, on the surface of the site and in surface fill. Building demolition materials, such as concrete, brick, terracotta, glass and timber were, however, located on the surface and in below-ground filling. These are considered as indicative of the possible presence of further hazardous building materials (HBM), including asbestos.

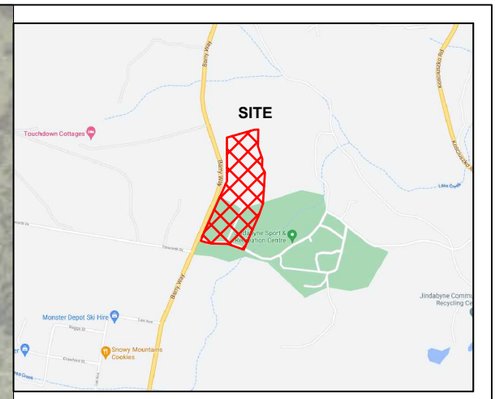
Although the sampling plan adopted for this limited intrusive investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations.

Douglas Partners Pty Ltd

Appendix A

Drawings 1 – 3





Locality Plan

LEGEND

- Approximate Site Boundary
- Approximate Boundaries for Areas that are part of a Different Development Application (Roads and TAFE Building) and are not Apart of the Site
- Approximate Area of Previous and Current Residential Dwellings (also known as south-east portion of the site). Observed Topsoil Fill and Surface Fill
- Approximate Area of Tee-Off Points and Greens
- Observed Fill (Appeared to not be Associated with Tees and Greens)
- Approximate Excavation Area for the Ski-Jump
- Approximate Area of Ski-Jump Construction Site (Residual Soils and Weathered Rock Spoil) Location
- Ground Surface ACM Sample M2
- SafeWork NSW Search Results (Underground Storage Tanks and Pistol Club)

0 30 60 90 120 150

1:3000 @ A3

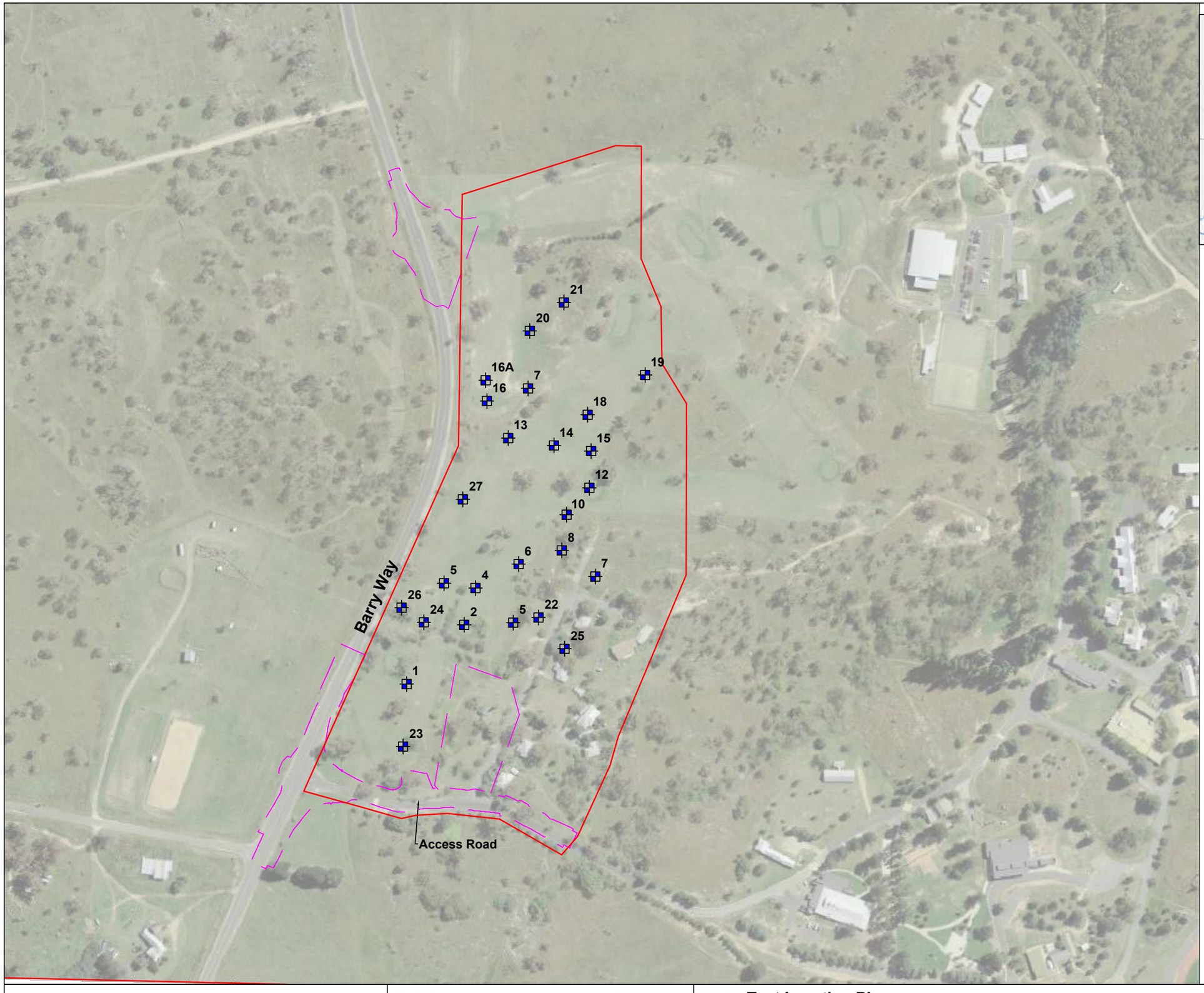
NOTE:
- Base drawing from maps.six.nsw.gov.au image extracted 22.06.2021.

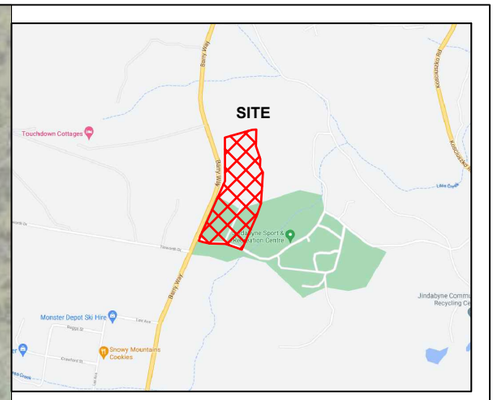
Douglas Partners
Geotechnics | Environment | Groundwater

CLIENT: School Infrastructure New South Wales		TITLE: **Site Location and Features Plan** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**
OFFICE: Canberra	DRAWN BY: SDG	
SCALE: As Shown	DATE: 29.11.2021	

N

PROJECT No:	103109.03
DRAWING No:	1
REVISION:	4





Locality Plan

LEGEND

- Approximate Site Boundary
- Approximate Boundaries for Areas that are part of a Different Development Application (Roads and TAFE Building) and are not Apart of the Site
- Approximate Test Pit Location

0 30 60 90 120 150

1:3000 @ A3

NOTE:

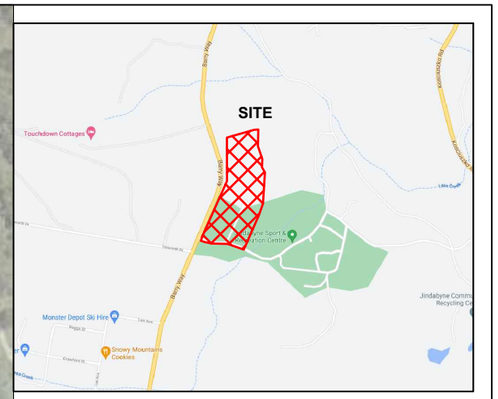
- Base drawing from maps.six.nsw.gov.au image extracted 22.06.2021.

Douglas Partners
Geotechnics | Environment | Groundwater

CLIENT: School Infrastructure New South Wales		TITLE: **Test Location Plan**
OFFICE: Canberra	DRAWN BY: SDG	**Proposed Jindabyne Central School**
SCALE: As Shown	DATE: 29.11.2021	**Part Lot 101 DP1019527, Jindabyne**

N

PROJECT No:	103109.03
DRAWING No:	2
REVISION:	4



Locality Plan

LEGEND

- Approximate Site Boundary
- Approximate Boundaries for Areas that are part of a Different Development Application (Roads and TAFE Building) and are not Apart of the Site
- 1m Contour Line
- 1m Contour Line

0 30 60 90 120 150

1:3000 @ A3

NOTE:
- Base drawing from C.M.S Surveys Pty Limited, dated 03/06/2021
- A surveyed site boundary has not been proved and as such, the boundary provided is approximate.

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure New South Wales	TITLE: **Survey Plan**	PROJECT No: 103109.03
	OFFICE: Canberra / DRAWN BY: SDG	**Proposed Jindabyne Central School**	DRAWING No: 3
	SCALE: As Shown / DATE: 29.11.2021	**Part Lot 101 DP1019527, Jindabyne**	REVISION: 4

Appendix B

About This Report

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

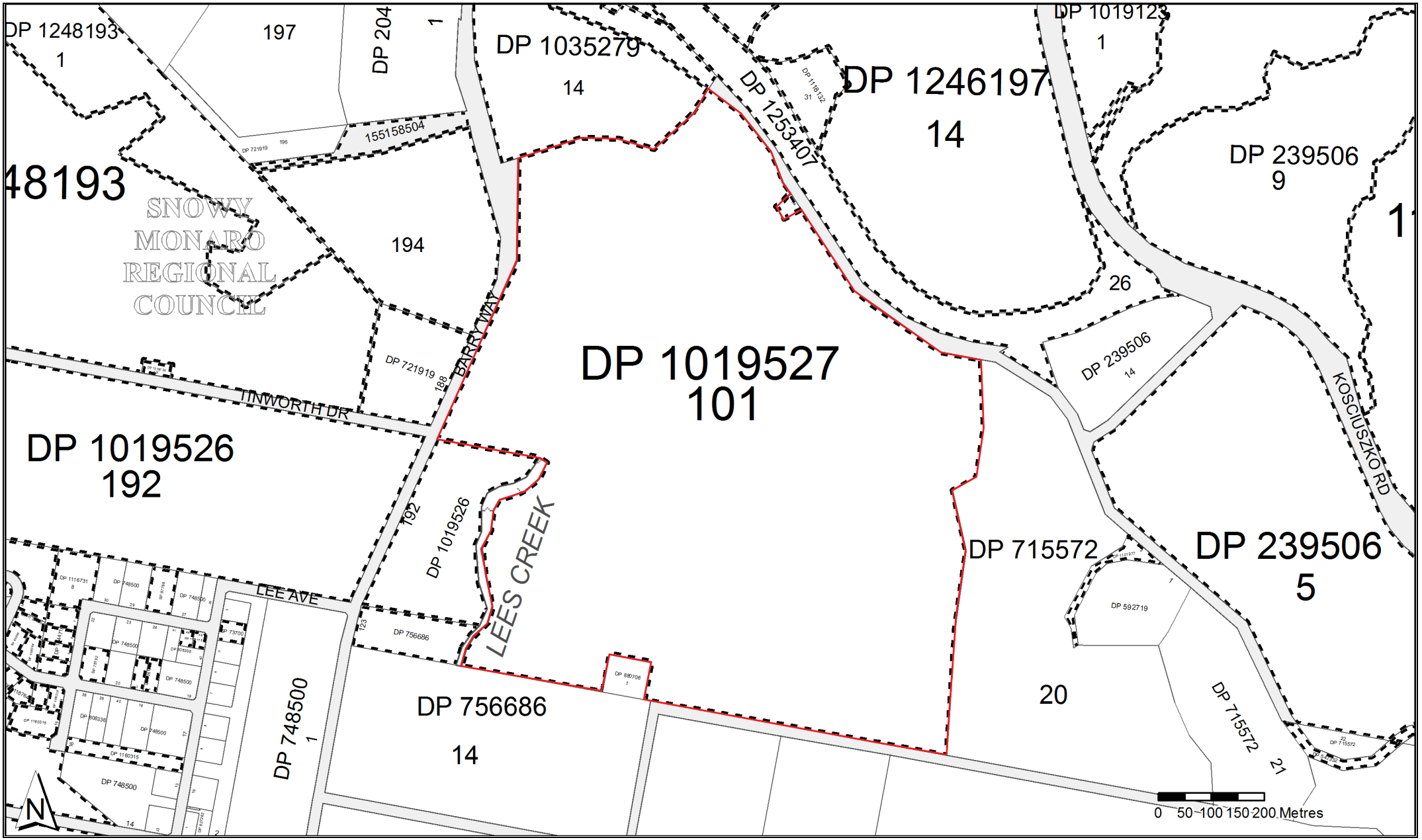
The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix C

Site Searches

Cadastral Records Enquiry Report : Lot 101 DP 1019527

Locality : JINDABYNE
Parish : CLYDE
LGA : SNOWY MONARO REGIONAL
County : WALLACE



This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps

PLAN FORM 2

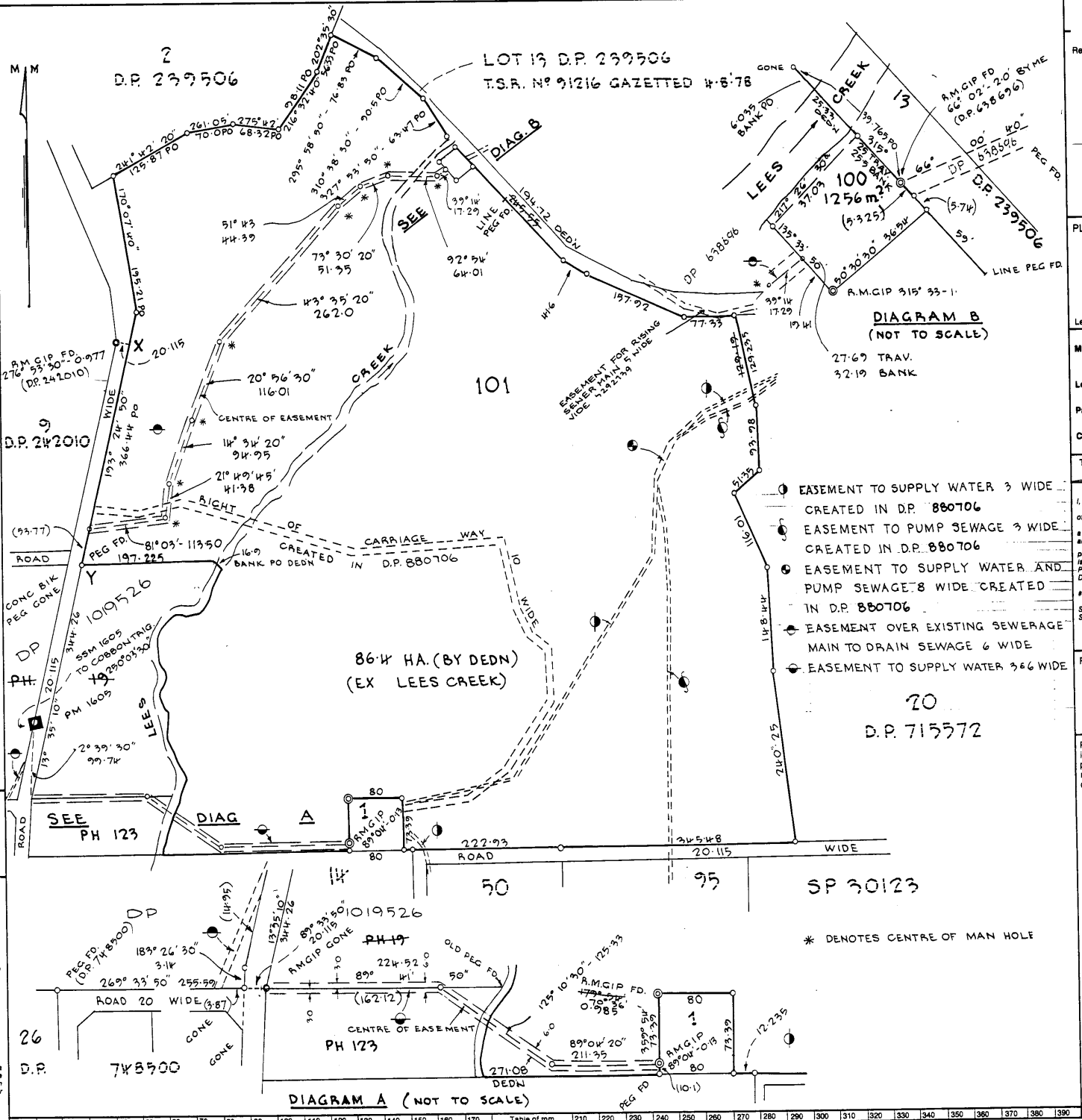
Plan Drawing only to appear in this space

SIGNATURE AND SEALS ONLY.

Signed by me Tony Carson as delegate of the Minister for Education and Training pursuant to Section 125 of the Education Reform Act 1990 and I hereby certify that I have no notice of the revocation of such delegation.

Lionel Weston
L. S. Weston
W. J. Weston
D. G. Weston
G. L. Weston

86.53Ha.



Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that —

(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b) the requirements of section 348 of the † Metropolitan Water, Sewerage and Drainage Act, 1924, as amended, † Hunter District Water, Sewerage, and Drainage Act, 1938, as amended

have been complied with by the applicant in relation to the proposed SUBDIVISION (Insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No. 2000/25

Date 15 AUGUST 2000

(Signature) M.R. SMITH Council Clerk

Council File No. ID 1104

*This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.

† Delete if inapplicable.

SURVEYOR'S REFERENCE: SRS 292

DP1019527

Registered: 16.11.2000

CA: SEE CERTIFICATE

Title System: TORRENS

Purpose: SUBDIVISION

Ref Map: PARISH#

Last Plan: DP880706 (DP239506)#

PLAN OF SUBDIVISION OF LOT 2 D.P. 880706 AND EASEMENT THROUGH LOT 2 D.P. 880706, PORTIONS 19 & 123 PARISH OF CLYDE

Lengths are in metres. Reduction Ratio 1: 1000

Mun./Shire City: SNOWY RIVER SHIRE

Locality: JINDABYNE

Parish: CLYDE

County: WALLACE

This is sheet 1 of my plan in sheets. (Delete if inapplicable).

I, REIN SCHOUTEN

of P.O. BOX 703 COOMA 2630

a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan LOT 100 & EASEMENTS is accurate and has been made in accordance with the Survey Practice Regulations, 1933 and any special requirements of the Department of Lands, and was completed on

the 12-12-88

Signature ..... Surveyor registered under Surveyors Act, 1929, as amended.

Datum Line of Azimuth: X - Y

#insert date of survey.

Plans used in preparation of survey/compilation.

DP 242010 748500 239506

PAR 19 123

DP 698696

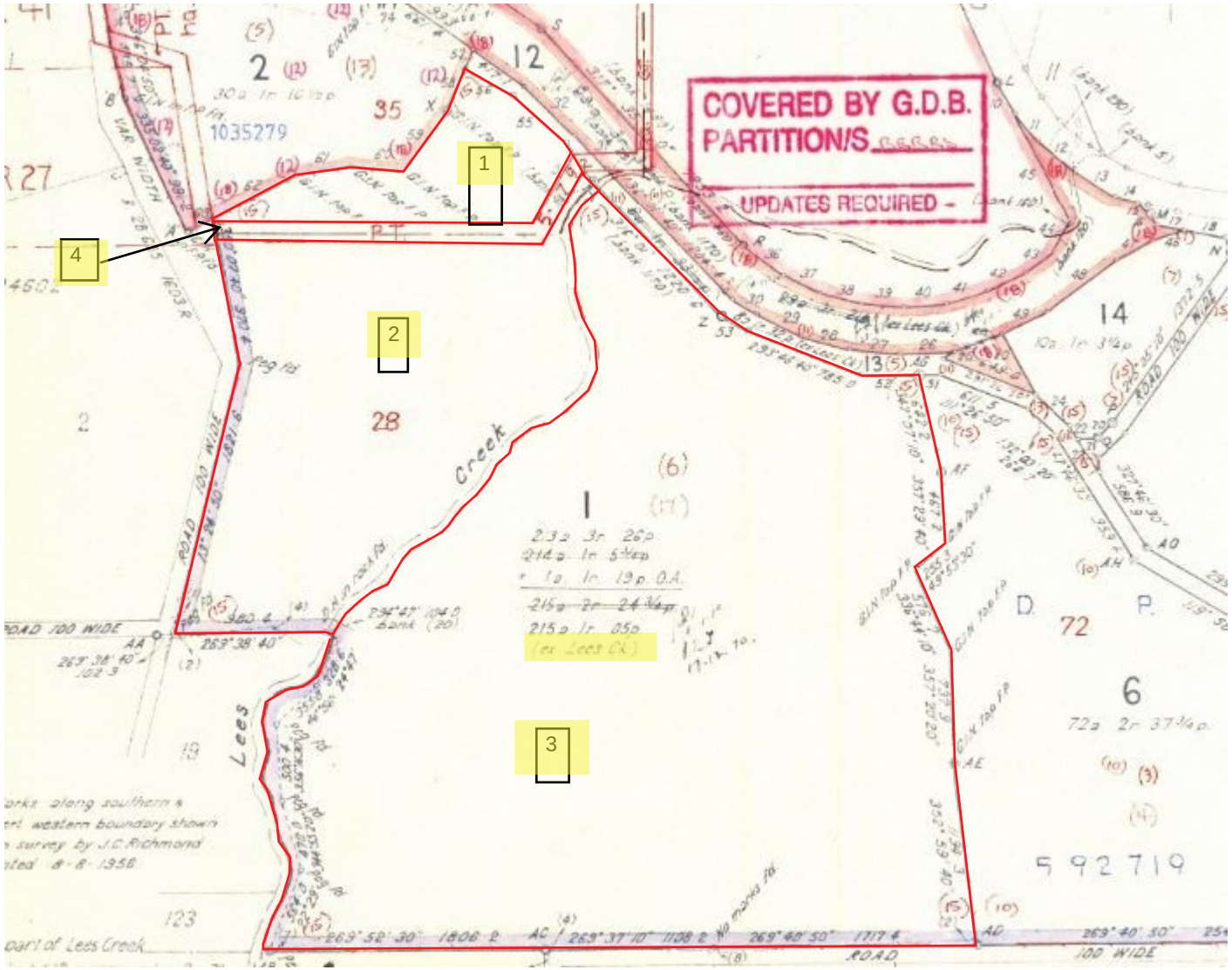
PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants.

PURSUANT TO SEC. 88 B OF THE CONVEYANCING ACT 1919 IT IS INTENDED TO CREATE

1 EASEMENT OVER EXISTING SEWERAGE MAIN TO DRAIN SEWAGE 6 WIDE

2 EASEMENT TO SUPPLY WATER 3 & 6 WIDE

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION



EXTRACT DP 239506

NEW SOUTH WALES
Seventy-five cents
STAMP DUTY
SYDNEY, N.S.W.

New South Wales

10290151

Vol. 10290 Fol. 151
Registered 22-4-1966
Registrar General.

GRANT UPON PURCHASE OF UNNECESSARY ROAD

(Under the Public Roads Act, 1902)

ELIZABETH the SECOND, by the Grace of God of the United Kingdom, Australia and her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith:—

To All to whom these Presents shall come, Greeting:—

Whereas SNOWY MOUNTAINS HYDRO-ELECTRIC AUTHORITY (the Corporation Sole constituted under the Snowy Mountains Hydro-electric Power Act 1949)

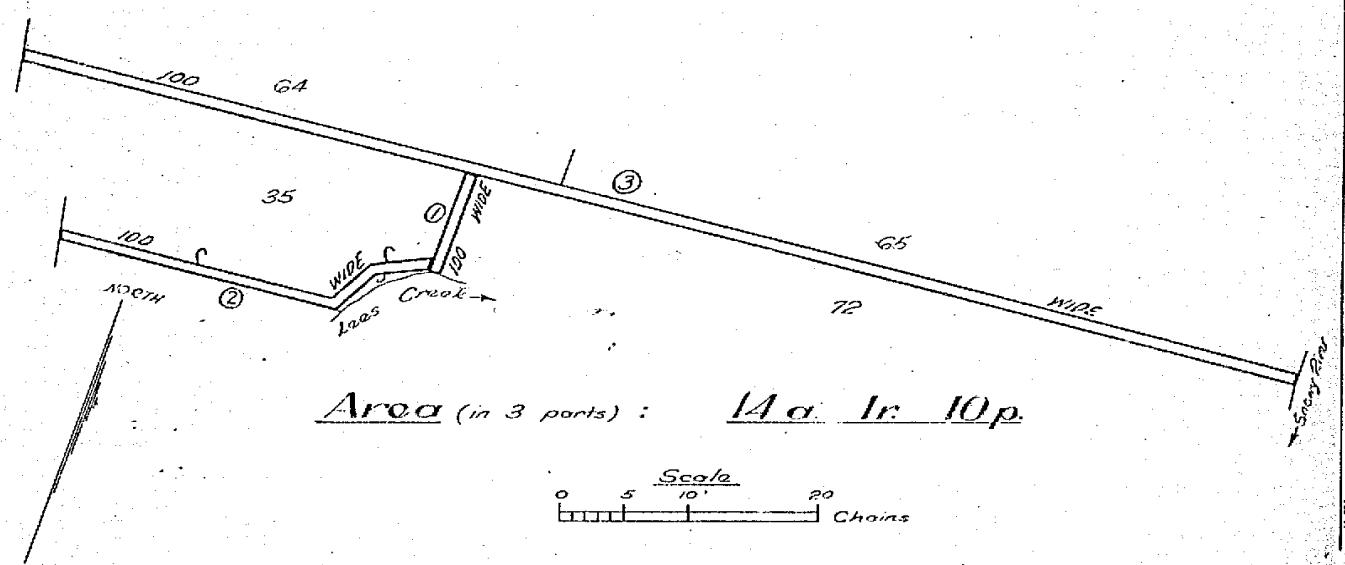
(hereinafter called the GRANTEE) being the owner of land adjoining the land hereinafter described and intended to be hereby granted (formerly roads which were duly closed in accordance with the provisions of the Public Roads Act, 1902) agreed to have such land granted to it upon payment of the sum of one hundred and fourteen pounds ten shillings

being the value thereof as determined by the Local Land Board AND WHEREAS all things required by law to be done to entitle the GRANTEE to a Grant of the fee simple of the said land Subject to the Reservations and Exceptions hereinafter contained have been done and performed NOW THESE PRESENTS WITNESS That in consideration of the premises WE DO HEREBY GRANT unto the GRANTEE Subject to the Reservations and Exceptions hereinafter contained ALL THAT parcel of land containing by admeasurement fourteen acres one rood ten perches

be the same more or less situated in the County of Wallace

Parish of Clyde in three parts FIRSTLY Being the closed road separating portion 35 from portion 72 and extending from the line connecting the North Eastern corner of portion 35 with the North Western corner of portion 72 in a Southerly direction to the left bank of Lees Creek SECONDLY Being the closed road reserved through portion 35 and extending from the Eastern boundary line of portion 35 in a South Westerly direction and thence in a Westerly direction along the Southern boundary line of portion 35 to the Southernmost South Western boundary line of portion 35 AND THIRDLY Being the closed road separating portions 64 and 65 from portion 35 the firstly described part of the subject 14 acres 1 rood 10 perches and portion 72 and extending from the line connecting the Southernmost South Western corner of portion 64 with the North Western corner of portion 35 in an Easterly direction to the right bank of the Snowy River

CANCELLED



As per Plan hereon TO HOLD unto the GRANTEE in fee simple

PROVIDED NEVERTHELESS AND WE DO HEREBY RESERVE AND EXCEPT unto Us Our Heirs and Successors all minerals which the said Land 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 said Land and to search for mine dig and remove the said minerals AND ALSO all such parts and so much of the said Land 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 said Land for the several purposes aforesaid or any of them IN TESTIMONY WHEREOF We have caused this Our Grant to be Sealed with the Seal of Our said State

AB

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 sixteenth day of March in the fifteenth year of Our Reign and in the year of Our Lord one Thousand nine hundred and sixty six

A. R. Butler
Governor

FOR ENDORSEMENTS SEE PAGE 2

St 1609 V. C. N. Blight, Government Printer

Vol. 10290 Fol 151

SCHEDULE OF REGISTERED PROPRIETORS

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
This Deed is cancelled as to part and New Certificates of Title Vol 11765 Fols 30 to 41 issued on 25-1-1972 for Lots 1 to 3, 5 and 7 to 14	Deposited Plan	239506		7-2-1972	
This deed is cancelled as to the whole residue Road New Certificates of Title have issued on 21-4-1972 for lots in Deposited Plan No. 551838 as follows:- Lots 1 to 4 residue Vol. 11821 Fols 179 to 183 respectively.					

REGISTRAR GENERAL

The residue of land in this certificate of title comprises Road

Entered 8th May 1972

REGISTRAR GENERAL

DP239506 14-1-72

SCHEDULE OF ENCUMBRANCES ETC.

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
			The interest of the Council of the Shire of Snowy River in the new roads shown on DP239506	7.10.1971				

(Page 2 of 2 pages)

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

11765030

[redacted]ICATE OF TITLE

NEW SOUTH WALES

[redacted] PROPERTY ACT, 1900

Vol. 11765 Fol. 30

Edition issued 25-1-1972

Prior Titles (Crown Grants)
Volume 467 Folio 156
Volume 539 Folio 1
Volume 2373 Folio 106
Volume 10290 Folio 151

(Page 1) Vol. 11765 Fol. 30

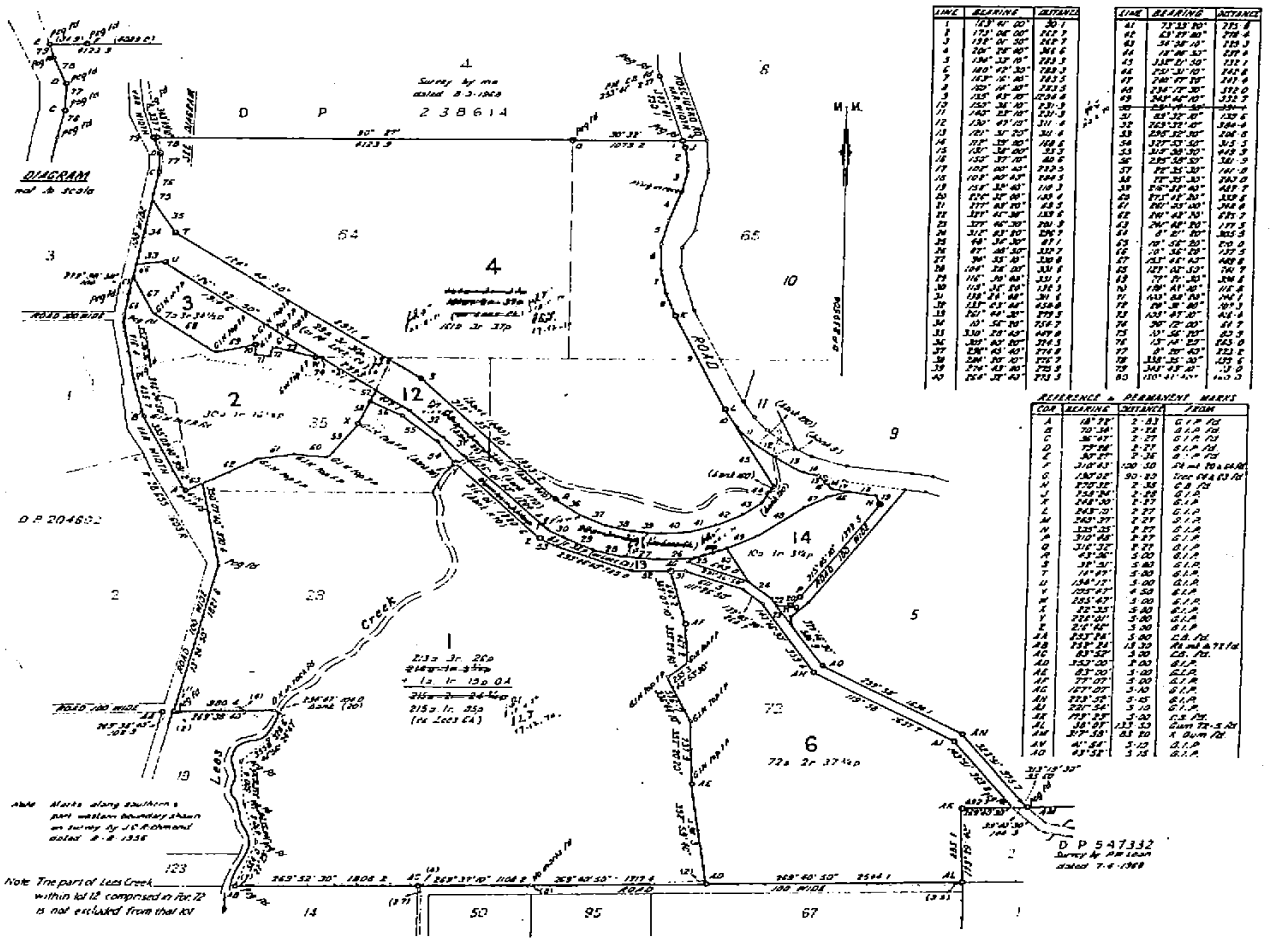
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

CANCELLED

Registrar General

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 239506 at Jindabyne in the Shire of Snowy River Parish of Clyde and County of Wallace. EXCEPTING THEREOUT the creek shown in the plan hereon and the minerals reserved by the Crown Grants.

FIRST SCHEDULE

~~SNOWY MOUNTAINS HYDRO-ELECTRIC AUTHORITY.~~

SECOND SCHEDULE

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

Registrar General

Vol. 11765 Fol. 30

M 703984

DP704181R

NO NEW C/T TO ISSUE

DP638696

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
Her Most Gracious Majesty Queen Elizabeth the Second	Transfer	M703984	19-4-1972	10-5-1972	[signature]

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION

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

Historical Title

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
2/12/2020 5:48PM

FOLIO: 1/239506

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 11765 FOL 30

Recorded	Number	Type of Instrument	C.T. Issue
5/6/1987		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
15/2/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
9/2/1994	U14209	APPLICATION	EDITION 1
1/2/1999	DP880706	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

jINDABYNE 2 PRINTED ON 2/12/2020

Received: 02/12/2020 17:47:58

RP65

REQUEST

Real Property Act 1900

U
014209 S

B

(A) **LAND**
Show no more than 20 References to Title.

Annexure attached

(B) **REGISTERED DEALING**
If applicable.

(C) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone	
354L	STATE SEARCH Box A909 Sydney South 2000 REFERENCE (max 15 characters):	AP R

(D) **APPLICANT** MINISTER FOR EDUCATION

(E) I, the Applicant, in regard to the above **Land/Registered Dealing**, request the Registrar General to

ISSUE NEW FOLIO IDENTIFIERS IN THE NAME OF THE MINISTER FOR EDUCATION FOR THE ATTACHED LAND.

(F) Certified correct for the purposes of the Real Property Act 1900. DATE 7-2-94

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

Signature of Witness

RONALD JOHN HILL
Name of Witness (BLOCK LETTERS)

Nyara Rds Mt Kuring-gai
Address of Witness

Signature of Applicant

CHECKED BY (office use only) 33/08

B

ANNEXURE

SCHOOL	LOT	SECTION	D.P.	FOLIO IDENTIFER
Lake Heights	191		15174	191/15174
	196		"	196/15174
	228 & 231		"	Auto Consol 6634-81
Lake Illawarra	1		534625	1/534625
	1		379271	1/379271
Lake Illawarra H.	22		558774	22/558774
Lake Jindabyne	1		239506	1/239506
Lakeside SSP	26	L	16392	26/L/16392
Lalor Pk	131		31869	131/31869
Lambton H	5		219868	5/219868
Lane Cove	1		115630	1/115630
	1		926135	1/926135
	1		948453	1/948453
	1		947259	1/947259
	38		5817	38/5817
	36		"	36/5817
	60		9952	60/9952
	2		593169	2/593169
Lane Cove W	14		182916	14/182916

R.B. SMITH, STATE SEARCH
Authorised Agent for
DEPARTMENT OF EDUCATION

R B Smith

Historical Title

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
2/12/2020 5:47PM

FOLIO: 2/880706

First Title(s): OLD SYSTEM
Prior Title(s): 1/239506

Recorded	Number	Type of Instrument	C.T. Issue
1/2/1999	DP880706	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
2/2/1999	5292739	TRANSFER GRANTING EASEMENT	EDITION 1
16/11/2000	DP1019527	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

jINDABYNE 2 PRINTED ON 2/12/2020

Received: 02/12/2020 17:47:47

Historical Title

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
2/12/2020 5:47PM

FOLIO: 101/1019527

First Title(s): VOL 539 FOL 1 VOL 467 FOL 156
VOL 2373 FOL 106 VOL 10290 FOL 151
Prior Title(s): 2/880706

Recorded	Number	Type of Instrument	C.T. Issue
16/11/2000	DP1019527	DEPOSITED PLAN	FOLIO CREATED EDITION 1
21/12/2006	AC828049	TRANSFER	EDITION 2
30/11/2011	AG650344	DEPARTMENTAL DEALING	

*** END OF SEARCH ***

jINDABYNE 2 PRINTED ON 2/12/2020

Received: 02/12/2020 17:47:22

LAND REGISTRY SERVICES

Title Search

InfoTrack

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 101/1019527

SEARCH DATE	TIME	EDITION NO	DATE
2/12/2020	5:46 PM	2	21/12/2006

LAND

LOT 101 IN DEPOSITED PLAN 1019527
AT JINDABYNE
LOCAL GOVERNMENT AREA SNOWY MONARO REGIONAL
PARISH OF CLYDE COUNTY OF WALLACE
TITLE DIAGRAM DP1019527

FIRST SCHEDULE

MINISTER ADMINISTERING THE SPORTING VENUES MANAGEMENT ACT 2002 (T AC828049)

SECOND SCHEDULE (9 NOTIFICATIONS)

---

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

* 2 LAND EXCLUDES THE CREEK SHOWN IN THE TITLE DIAGRAM

3 DP880706 EASEMENT TO SUPPLY WATER 3 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

4 DP880706 EASEMENT TO PUMP SEWAGE 3 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

5 DP880706 EASEMENT TO SUPPLY WATER AND PUMP SEWAGE 8 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

6 DP880706 RIGHT OF CARRIAGEWAY 10 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

7 5292739 EASEMENT FOR RISING SEWER MAIN 5 WIDE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM

8 DP1019527 EASEMENT OVER EXISTING SEWERAGE MAIN TO DRAIN SEWAGE 6 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

9 DP1019527 EASEMENT TO SUPPLY WATER 3 AND 6 WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
ISLINGTON	Caltex Service Station	240 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.91138644	151.7457701
ISLINGTON	Shell Pipeline Easement (vacant land)	24 Fern STREET	Other Petroleum	Regulation under CLM Act not required	-32.91706254	151.7473809
JAMISONTOWN	BP Service Station Jamisontown	124 - 128 Mulgoa ROAD	Service Station	Regulation under CLM Act not required	-33.76978323	150.6764977
JAMISONTOWN	Former Caltex Jamisontown	229-231 Mulgoa ROAD	Service Station	Regulation under CLM Act not required	-33.76661447	150.6784735
JAMISONTOWN	7-Eleven Service Station	92 Mulgoa ROAD	Service Station	Contamination currently regulated under CLM Act	-33.7667231	150.6796488
JANNALI	Former Mobil Service Station	121 Georges River ROAD	Service Station	Regulation under CLM Act not required	-34.01614613	151.0681921
JANNALI	Former IGA	541 Box ROAD	Other Industry	Regulation under CLM Act not required	-34.01602134	151.0660384
JENNINGS	Jennings Former Arsenic Poison Factory	Duke Street, Manor Street, and Ballandean STREET	Chemical Industry	Contamination currently regulated under CLM Act	-28.929342	151.9298622
JENNINGS	United Jennings Service Station	1823 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-28.9323235	151.9260334
JESMOND	Caltex Service Station	27 Bluegum ROAD	Service Station	Regulation under CLM Act not required	-32.9029287	151.691164
JINDABYNE	BP Service Station (Reliance Petroleum)	8 Kosciuszko ROAD	Service Station	Regulation under CLM Act not required	-36.41478692	148.6178882
JINDABYNE	Caltex Service Station	50 Kosciuszko ROAD	Service Station	Regulation under CLM Act not required	-36.41395847	148.6225113
JINGELLIC	Former Jingellic School	3179 River ROAD	Other Industry	Regulation under CLM Act not required	-35.92649487	147.7010655
JUNEE	Subdivision Proposal	5858 Gundagai ROAD	Unclassified	Regulation under CLM Act not required	-34.87783587	147.6067578
JUNEE	United Junee Service Station	No. 118-134 BROADWAY	Service Station	Regulation under CLM Act not required	-34.86808328	147.5834883
JUNEE	Junee Railway Workshops	92 Harold STREET	Other Industry	Under assessment	-34.88393	147.579631

Licence No. 35/008702

APPLICATION FOR RENEWAL
OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION THEREUNDER

DECLARATION: Please renew licence number 35/008702 to 19/10/2004 . I confirm that all the licence details shown below are correct (amend if necessary).

LEA DAVIDSON — 19/9/03

(Signature) *(Please print name)* *(Date signed)*

for: SPORT & RECREATION DEPT

*THIS **SIGNED** DECLARATION SHOULD BE **RETURNED TO:***

WorkCover New South Wales
Dangerous Goods Licensing Section
LOCKED BAG 2906
LISAROW NSW 2252

Enquiries:ph (02) 43215500
fax (02) 92875500

Details of licence on 5 September 2003

Licence Number 35/008702 **Expiry Date** 19/10/2003

Licensee SPORT & RECREATION DEPT
SPORT & RECREATION CENTRE, JINDABYNE

Postal Address: SPORT & RECREATION CENTRE, JINDABYNE P O BOX 514
JINDABYNE NSW 2627

6450 0200

Licensee Contact LEA DAVIDSON Ph. 02 ~~6456 2242~~ Fax. 02 6456 2917

Premises Licensed to Keep Dangerous Goods INGEBYRE RD
SPORT & RECREATION DEPT SPORT & RECREATION CENTRE, JINDABYNE
BARRY WAY & INGEBYRA RD JINDABYNE 2627

Nature of Site SPORT

Major Supplier of Dangerous Goods VARIOUS

Emergency Contact for this Site LEA DAVIDSON Ph. ~~02 6456 2242~~

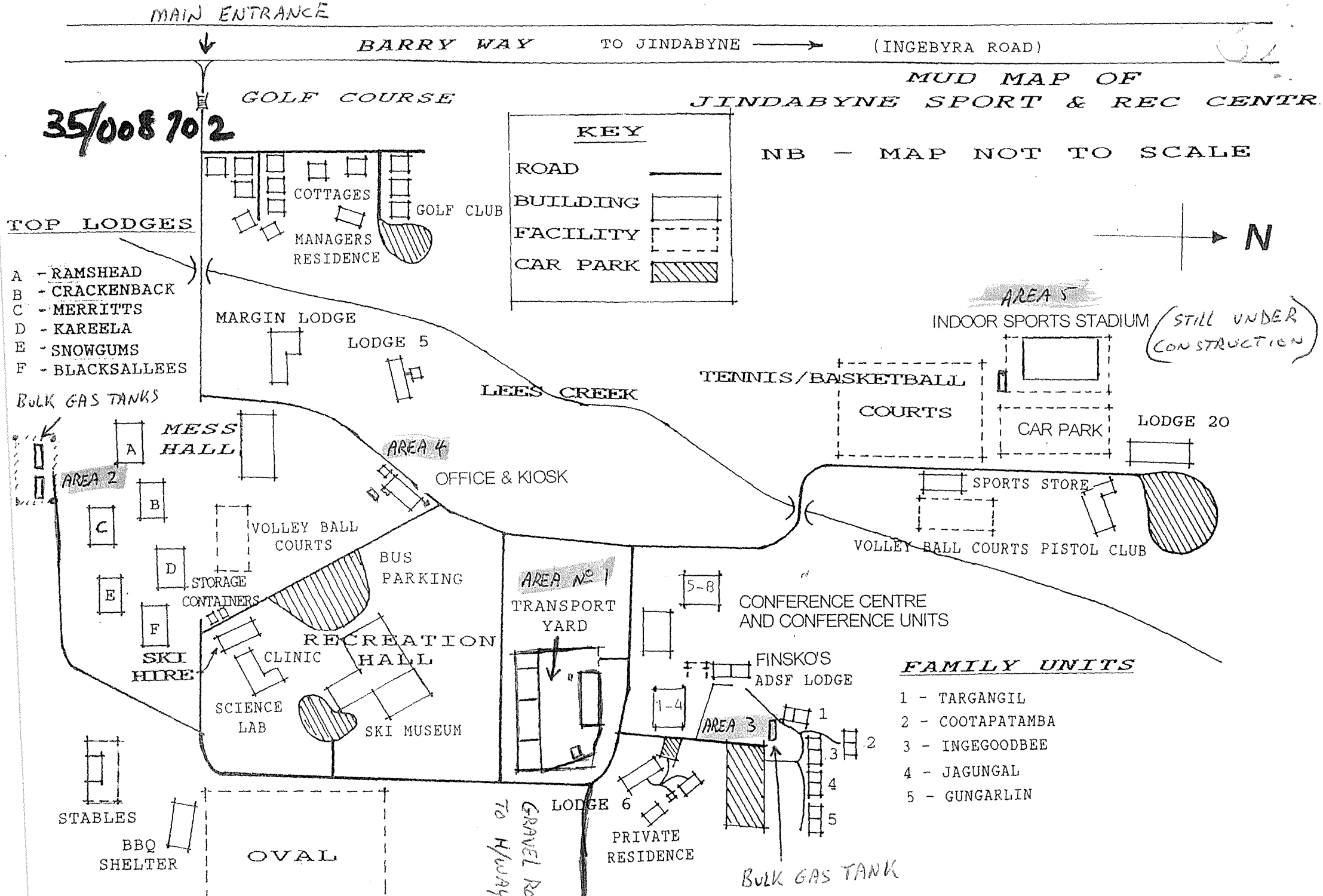
Site staffing 8 HRS 7 DAYS

6450 0200
0412 295 125

Details of Depots

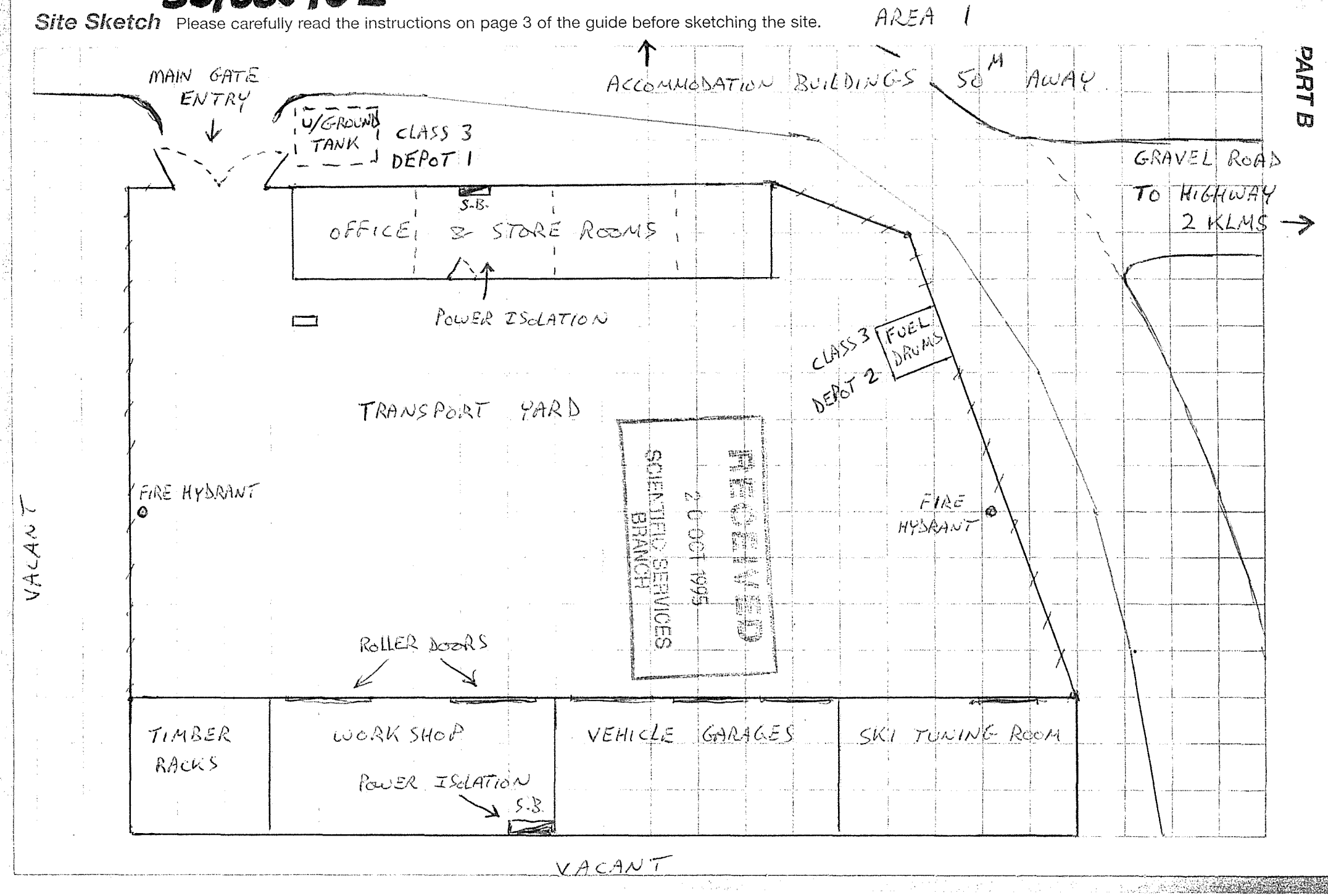
Depot No.	Depot Type	Goods Stored in Depot	Qty
1	**UNDERGROUND TANK**	**Class 3**	**5000 L**
	UN 1203 PETROL		3000 L
2	**ROOFED STORE**	**Class 3**	**450 L**
	UN 1203 PETROL		200 L
	UN 1300 TURPENTINE SUBSTITUTE		20 L
3	**ABOVE-GROUND TANK**	**Class 2.1**	**6000 L**
	UN 1075 PETROLEUM GASES, LIQUEFIED		5000 L
4	**ABOVE-GROUND TANK**	**Class 2.1**	**3000 L**
	UN 1075 PETROLEUM GASES, LIQUEFIED		2500 L
5	**ABOVE-GROUND TANK**	**Class 2.1**	**1000 L**
	UN 1075 PETROLEUM GASES, LIQUEFIED		800 L

ATF


MAIN ENTRANCE
BARRY WAY
TO JINDABYNE
(INGEBYRA ROAD)
35/0087 02
GOLF COURSE
MUD MAP OF
JINDABYNE SPORT & REC CENTR
KEY
ROAD
BUILDING
FACILITY
CAR PARK
NB — MAP NOT TO SCALE
N
COTTAGES
GOLF CLUB
MANAGERS RESIDENCE
TOP LODGES
A - RAMSHEAD
B - CRACKENBACK
C - MERRITTS
D - KAREELA
E - SNOWGUMS
F - BLACKSALLEES
MARGIN LODGE
LODGE 5
LEES CREEK
AREA 5
INDOOR SPORTS STADIUM
(STILL UNDER CONSTRUCTION)
TENNIS/BASKETBALL COURTS
CAR PARK
LODGE 20
BULK GAS TANKS
MESS HALL
AREA 2
AREA 4
OFFICE & KIOSK
SPORTS STORE
VOLLEY BALL COURTS PISTOL CLUB
VOLLEY BALL COURTS
BUS PARKING
STORAGE CONTAINERS
AREA Nº 1
TRANSPORT YARD
5-8
CONFERENCE CENTRE AND CONFERENCE UNITS
SKI HIRE
CLINIC
RECREATION HALL
FINSKO'S ADSF LODGE
1-4
AREA 3
SCIENCE LAB
SKI MUSEUM
FAMILY UNITS
1 - TARGANGIL
2 - COOTAPATAMBA
3 - INGEGOODBEE
4 - JAGUNGAL
5 - GUNGARLIN
STABLES
BBQ SHELTER
OVAL
LODGE 6
PRIVATE RESIDENCE
GRAVEL RD TO H/WAY
BULK GAS TANK

35/008702

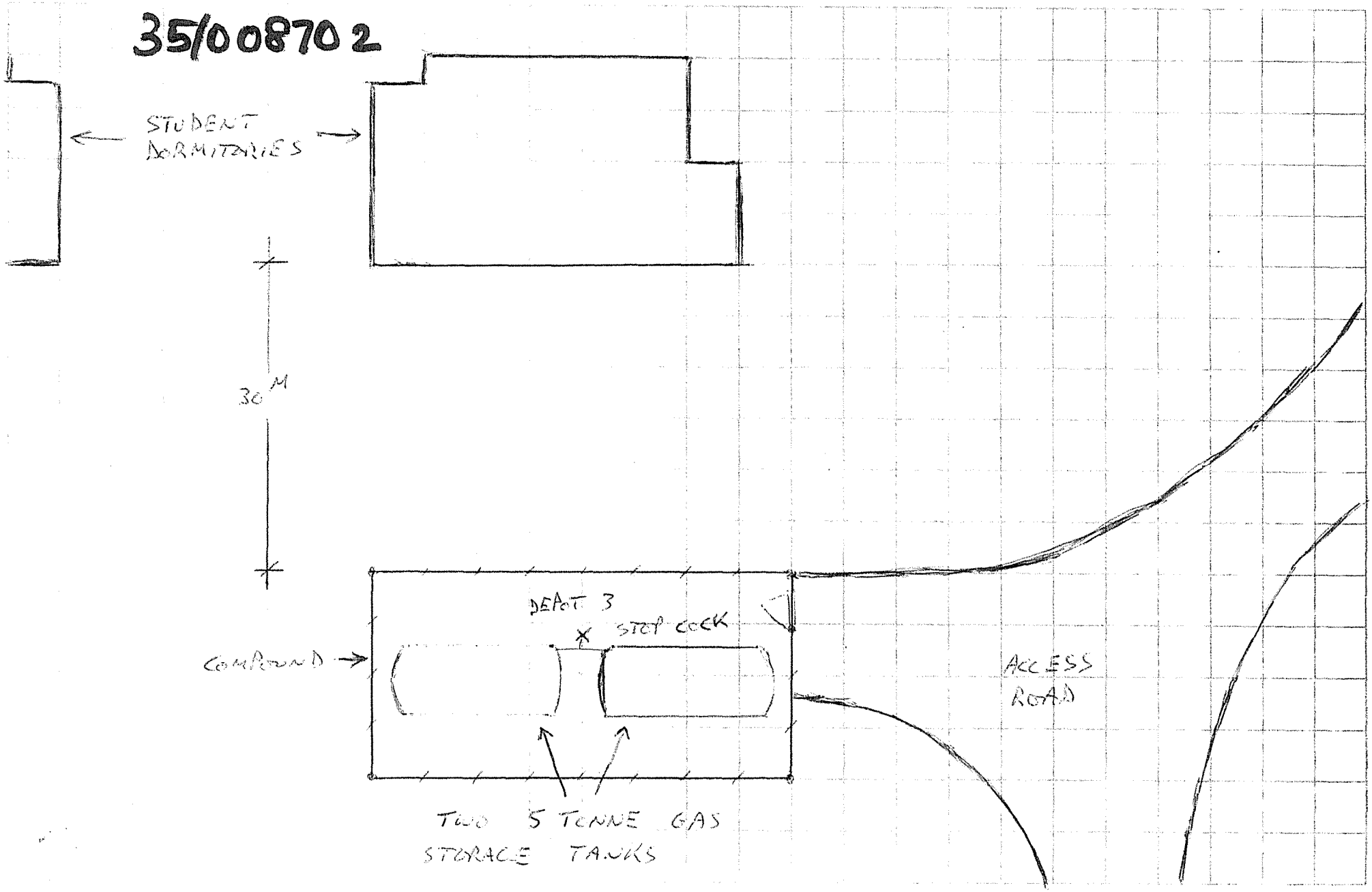
Site Sketch Please carefully read the instructions on page 3 of the guide before sketching the site.



Site Sketch Please carefully read the instructions on page 3 of the guide before sketching the site.

AREA 2

35/00870 2

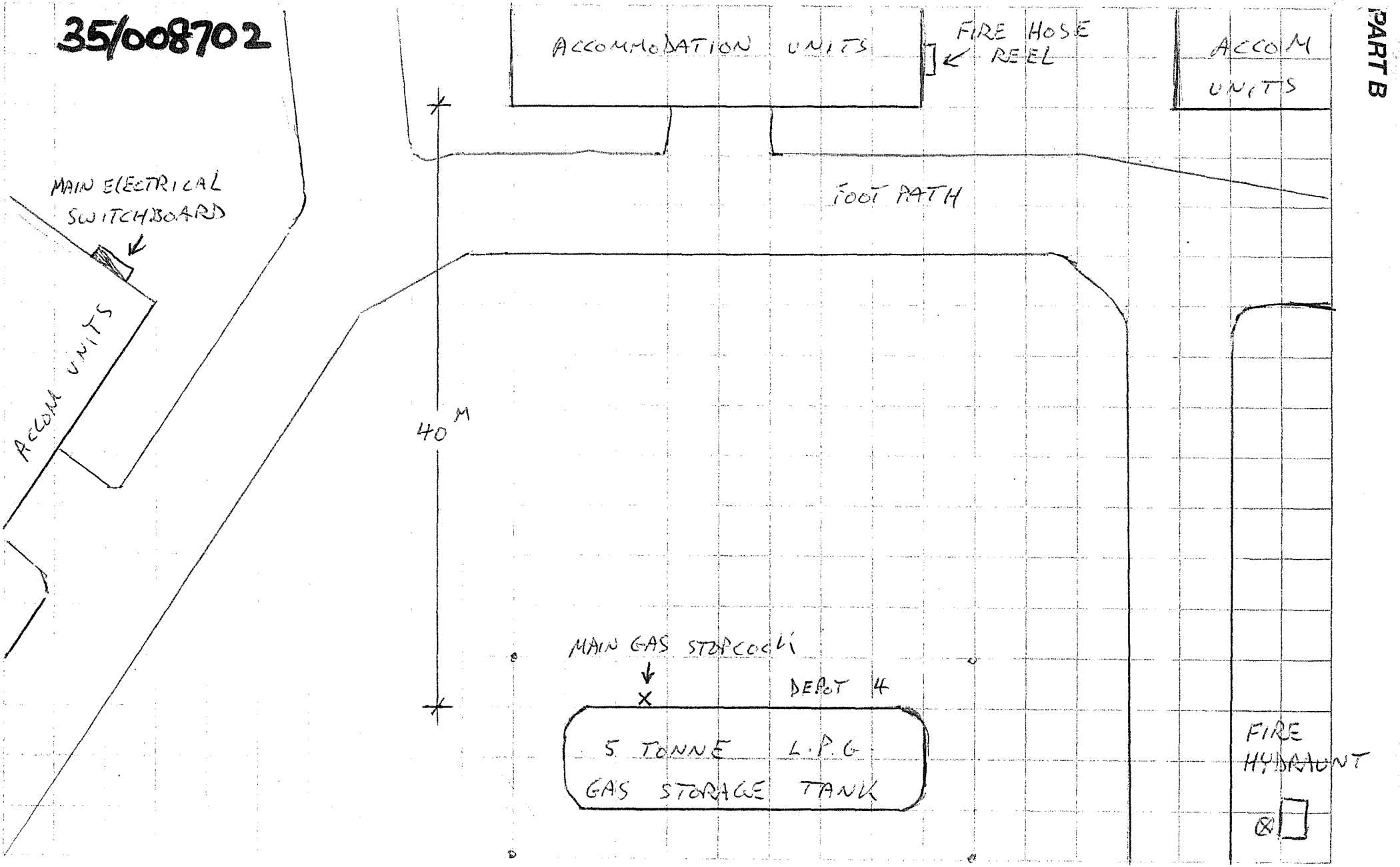


PART B

Site Sketch Please carefully read the instructions on page 3 of the guide before sketching the site.

AREA 3

35/008702



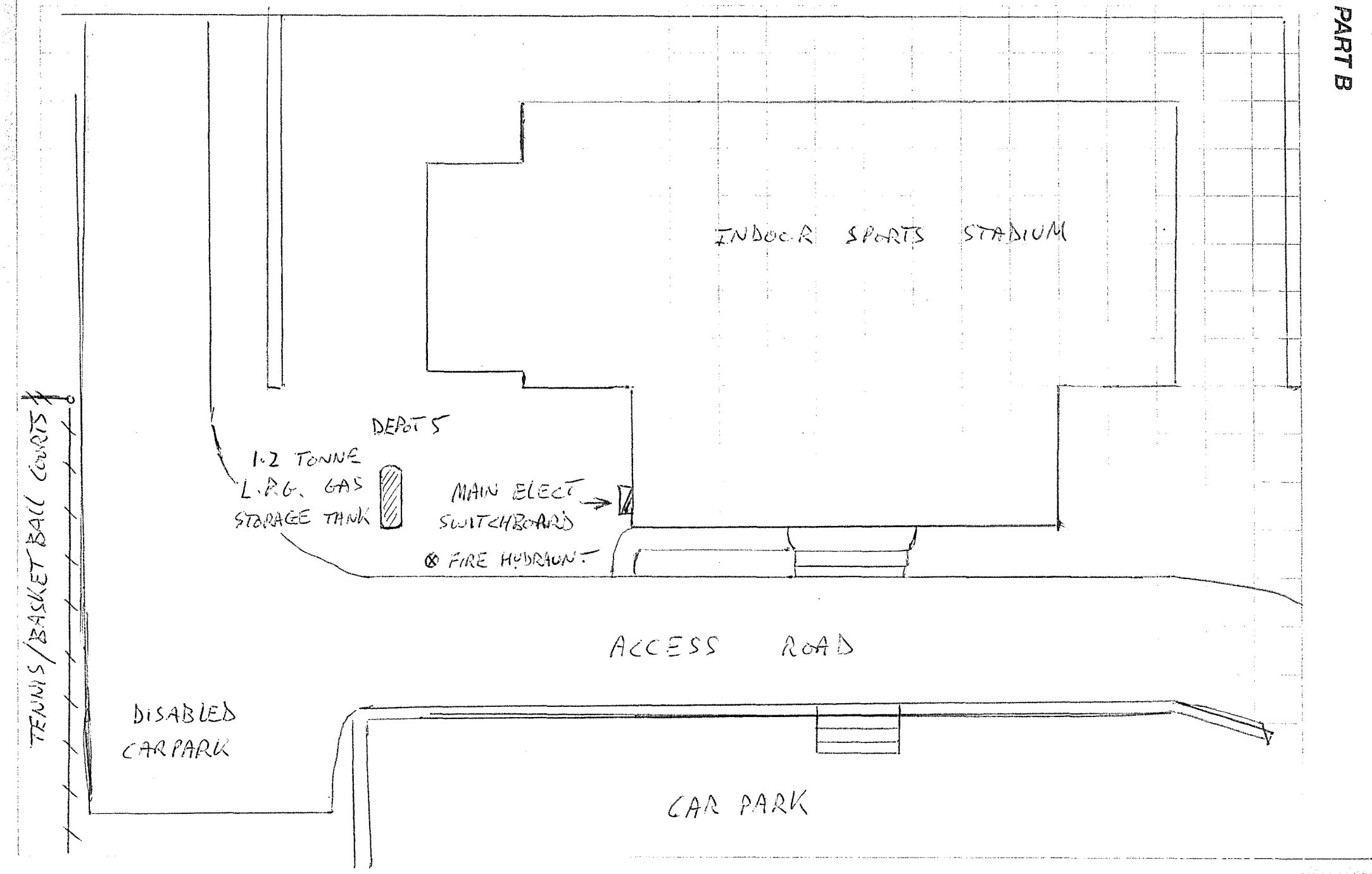
PART B

35/008702

Site Sketch Please carefully read the instructions on page 3 of the guide before sketching the site.

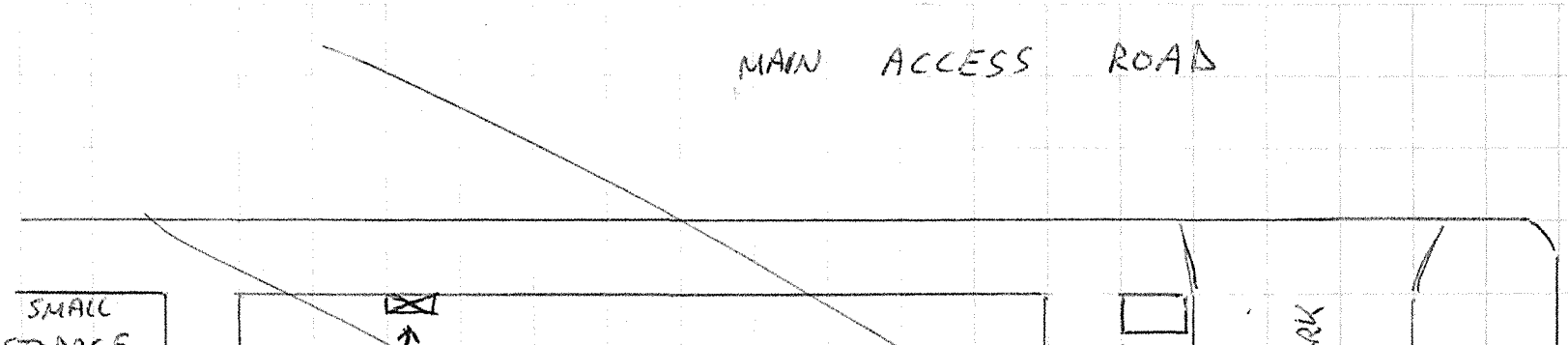
AREA 5

PART B



Site Sketch Please carefully read the instructions on page 3 of the guide before sketching the site.

AREA 4



WorkCover New South Wales

Details of Licence for Keeping Dangerous Goods on 15 June 1996

Licence Number 35/008702 **Expiry Date** 15/08/89

Licensee Details

Licensee SPORT RECREATION & RACING DEPT

Trading name

Postal Address BOX 422 P O, NORTH SYDNEY 2060

Licensee Contact

Site Details

Premises Licensed to Keep Dangerous Goods
MAIN RD SPORT & RECREATION CTRE
JINDABYNE 2627

Nature of Site PRIVATE DWELLING **Supplier** NOT APPLICABLE

Emergency Contact ph.

Site staffing

Details of Depots

Depot No.	Depot Type	Goods Stored in Depot	Qty
1	UNDERGROUND TANK	Class 3	8000 L
2	UNDERGROUND TANK	Class 3	5000 L
3	ABOVE-GROUND TANK	Class 2.1	7000 L
4	ABOVE-GROUND TANK	Class 2.1	20000 L

Printed by Scientific Services Branch, 400 Kent St, Sydney 2000 ☎ (02) 370 5187

OP 2

Aug 87 No Fee

Application is hereby made for ~~a licence~~ (or amendment of the licence) for the keeping of dangerous goods in or on the premises described below.

~~the transfer of the licence~~

OPERATOR THREE

(*delete whichever is not required)

FEE: $10.00 per Depot for new licence.
$10.00 for amendment or ~~transfer~~.

Name of Applicant in full (see over)	~~DEPARTMENT OF~~ LEISURE, SPORT & TOURISM, Dept of.
Trading name or occupier's name (if any)	LAKE JINDABYNE SPORT & RECREATION CENTRE.
Postal address	P.O. BOX 422, NORTH SYDNEY. Postcode 2060
Address of the premises including street number (if any)	MAIN ROAD, , JINDABYNE. Postcode 2627
Nature of premises (see over)	SPORT AND RECREATION CENTRE.
Telephone number of applicant	STD Code 02 Number 923 4584.

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (see over)	Storage capacity	Dangerous goods: Product being stored	C & C Office use only
1	~~Below~~ under ground tank	8000 l	Petrol 3.1	DD 004 120 0 2020 8
2	~~Below~~ under ground tank	4500 l	standard petrol	20205
3	Above ground tank	7000 l	LPG 2.1	1 100 73
4	Above ground tank	20,000 l	LPG	1 100 24
5				
6				
7				
8				
9				
10				
11				
12				

DEPARTMENT OF INDUSTRIAL RELATIONS
WOLLONGONG
4 MAR 1986
RECEIVED
No. DG 0171

Has site plan been approved? Yes ✓ No — If yes, no plans required. If no, please attach site plan.

Have premises previously been licensed? Yes ✓ No — If yes, state name of previous occupier. AS ABOVE.

Name of company supplying flammable liquid (if any)

Signature of applicant ..... Date 9/12/54

For external explosives magazine(s), please fill in side 2.

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

Signature of Inspector ..... Date .....

Licence No.

Trading name or occupier's name (if any)	Department of Public Works. Light, Heat & Power Committee
Postal address	State Office Block Phillip St. Sydney. Postcode 2000
Telephone number of applicant	STD Code 0648. Number 62242
Address of the premises in or on which the depot or depots are situated (including street number, if any)	Sports & Recreation Service Centre Lake Jindabyne Postcode 2627.
Nature of premises (see over)	Recreation Centre

PLEASE ATTACH SITE PLAN

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (see over)	Storage capacity	Dangerous goods	
			Product being stored	C & C Office use only
1	Above Ground Tank.	11,900 L	L.P.G.	
2	✓	11,900L	LPG.	
3	✓	6760 L.	L.PG.	
4	Underground Tank.	5000 L	M/S	
5	✓	2273 L	M/S.	
6	External Package Store	4000 L	Flammable Liquids	
7				
8				
9				
10				
11				
12				

Name of company supplying flammable liquid (if any) Contract

Have premises previously been licensed? Yes

If known, state name of previous occupier Jindabyne National Fitness Camp. Licence No. 8702

Signature of applicant X. M. M[illegible] Date 28-4-81

For external explosives magazine(s), please fill in side 2.

LICENCE No.

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

Signature of Inspector ....

Date ....

to. 15-8-72.

DIRECTIONS

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, Box R.216, Royal Exchange Sydney, N.S.W. 2000 and must be accompanied by the prescribed fee, as set out hereunder:

Registration of Premises (Fee $3.00 p.a.) – For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots; or 500 gallons of mineral spirit, if kept in an underground tank depot; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, $6.50 p.a.) – For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1, 2 and 9.

Store License, Div. B (Fee, See Regulation 7) – For quantities exceeding 4,000 gallons of mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.
For the keeping of Dangerous Goods of Classes 3 and/or 4. ($15.00 p.a.).

Fees for the keeping of inflammable liquid and dangerous goods in excess of the above stated quantities and also for Liquid Petroleum Gas storage are set out in Regulation 7.

NO FEE REQUIRED New Licence

1. Name of occupier including full christian names.	The DIRECTOR NATIONAL FITNESS and RECREATION SERVICE N.S.W. SPORT & RECREATION SERVICE OF N.S.W.
2. Trading Name (if any)	NATIONAL FITNESS CENTRE
3. Locality of the premises in which the depot or depots are situated	No. or Name MAIN ROAD NATIONAL FITNESS CENTRE Street NOT NAMED. Town Jindabyne
4. Postal address	C/- POST OFFICE Box 422 NORTH SYDNEY 2060 Jindabyne Postcode 2627
5. Occupation	Field Study Centre
6. Nature of premises (dwelling, garage etc.)	UNDERGROUND

7. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time. UNDERGROUND - 1,000 GALS MOTOR SPIRIT SUPER

PLEASE ATTACH PLAN OF PREMISES

Depot No.	Construction of depots*			Inflammable liquid		Dangerous goods					
	Walls	Roof	Floor	Mineral spirit gallons	Mineral oil gallons	Class 1 gallons	Class 2 gallons	Class 3 lb	Class 4 cu ft	Class 5A water gal	Class 9 gallons
1	UNDERGROUND			~~1000~~							
2				2273 Litres							
3											
4											
5											
6											
7										No	FEE
8											
9										12/5/72	
10										Rec. No	2936

* If product is kept in tanks describe depots as underground or aboveground tanks.

Signature of applicant Rob McGregor

Date of application 3.2., 1972

CERTIFICATE OF INSPECTION

I, _____ being an Inspector under the Inflammable Liquid Act, 1915 (as amended), do hereby certify that the premises or store herein referred to and described is suitable with regard to its situation and construction for the safe keeping of inflammable liquid and/or dangerous goods in quantity and nature specified.

Place _____ Signature of Inspector _____

Shannon Goodsell

From: Jeni Hamilton <jeni.hamilton@sport.nsw.gov.au>
Sent: Monday, 29 November 2021 1:15 PM
To: Shannon Goodsell
Subject: RE: Jindabyne School

Hi Shannon,

I believe originally the site had two underground tanks.

One near Jillamatong lodge (on your map that would have been Area 4 near where it says Office) and one in the maintenance/transport yard. (Area 1)

Both have been removed many years ago.

Hope that helps.

Thanks,

Jeni Hamilton
A/Centre Manager
Southern Region | Regional Delivery

Jindabyne Sport and Recreation Centre
207 Barry Way, Jindabyne NSW 2627
PO Box 514, Jindabyne, NSW 2627

☎ (02) 6450 0200 | ☎ 0412 395 126
✉ jeni.hamilton@sport.nsw.gov.au 💻 sport.nsw.gov.au

The Office of Sport acknowledges the Aboriginal people, the Traditional Custodians of this land, and pays respect to our Aboriginal Elders – past, present and emerging.

From: Shannon Goodsell <Shannon.Goodsell@douglaspartners.com.au>
Sent: Thursday, 25 November 2021 11:18 AM
To: Jeni Hamilton <jeni.hamilton@sport.nsw.gov.au>
Subject: Jindabyne School

Hi Jeni,

I just tried contacting Eric but I have just seen that he is on long service leave.

I'm currently working on the contamination reports for the Jindabyne school site and I was hoping you could help me out with something. I have recently received a dangerous goods search from SafeWork NSW (attached) and they have highlighted that some underground fuel storage tanks are present/were present within the sport and rec site.

On the plans of the search there only seems to be one underground storage tank marked up but the search has noted more than one underground tank. I was wondering if you had any idea if there are other tanks present on site or the whereabouts of removed tanks on site? If so could you please mark up the approximate locations?

Any help would be greatly appreciated.

Thank you,

Shannon Goodsell | Environmental Scientist
Douglas Partners Pty Ltd | ABN 75 053 980 117 | www.douglaspartners.com.au
Unit 2 73 Sheppard Street Hume ACT 2620 | PO Box 1487 Fyshwick ACT 2609
P: 02 6260 2788 | M: 0407 636 645 | E: Shannon.Goodsell@douglaspartners.com.au

To find information on our COVID-19 measures, please visit douglaspartners.com.au/news/covid-19

Enquiries 1300 345 345
Our Ref Certificate Number 1033/21 | P/N 255239
Your Ref 103109.01

SNOWY MONARO REGIONAL COUNCIL

Douglas Partners
PO Box1487
FYSHWICK ACT 2609

Planning Certificate – Section 10.7

Environmental Planning and Assessment Act 1979

Section 10.7(2) Details

In accordance with the requirements of section 10.7(2) of the Environmental Planning and Assessment Act 1979 (as amended), the following prescribed matters relate to the land at the date of this certificate.

Certificate Information	
Certificate Number	1033/21
Certificate Date	19/02/2021
Your Reference	103109.01

Property Description	
Address	Jindabyne Sport & Recreation Centre 207 Barry Way JINDABYNE NSW 2627
Land Title	Lot: 101 DP: 1019527
Assessment Number	40541922

This certificate provides information on how a property (such as land and buildings) may be used and the limits on its development. The certificate contains information Council is aware of through its records and environmental plans, along with data supplied by the State Government.

Snowy Monaro Regional Council does not accept any liability for anything contained in this certificate which has been supplied by third-party sources and does not warrant the accuracy of the contents.

All users of this certificate must acknowledge that Snowy Monaro Regional Council does not owe them any duty of care and they indemnify Snowy Monaro Regional Council from all claims demands suits actions and proceedings for damages and consequential loss howsoever arising from their use of this certificate and its contents where third-party information is relied upon.

Column 1 Section 10.7(2) (Schedule 4 EP&A Regulation 2000)		Identification of the matter referred to in Column 1 and the extent to which it applies to the land
1	Names of relevant planning instruments and DCPs	
(1)	The name of each environmental planning instrument that applies to the carrying out of development on the land.	Snowy River Local Environmental Plan 2013 Snowy River Local Environmental Plan 2013 (Amendment No 1) See Note 6 for list of State Environmental Planning Policies
(2)	The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act (unless the Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved).	Nil
(3)	The name of each development control plan that applies to the carrying out of development on the land.	"Snowy River Shire Council Development Control Plan 2013 (Amendment 1) The plan was adopted by Council on 26 November 2013 and came into effect on 20 December 2013. The purpose of DCP 2013 is a source of information covering the technical, legislative and administrative aspects of development within the former Local Government boundary of Snowy River Shire. It provides detailed provisions to guide development so that it achieves the aims and objectives of the Snowy River Local Environmental Plan 2013. The DCP includes detailed objectives and controls for ensuring well designed, quality land use and development within the Snowy Monaro Regional Council. This plan applies to all land to which the Snowy River Local Environmental Plan 2013 applies excluding the site specific Development Control Plan T2 Tyrolean Village Stage 3.
In this clause, proposed environmental planning instrument includes a planning proposal for a LEP or a draft environmental planning instrument.		
2	Zoning and land use under relevant LEPs	
For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a SEPP or proposed SEPP) that includes the land in any zone (however described):		
(a)	the identity of the zone, whether by reference to a name (such as “Residential Zone” or “Heritage Area”) or by reference to a number (such as “Zone No 2 (a)”),	RU1 Primary Production
(b)	the purposes for which the instrument provides that development may be carried out within the zone without the need for development consent,	See Note 7 – Land Use Table
(c)	the purposes for which the instrument provides that development may not be carried out	See Note 7 – Land Use Table

	within the zone except with development consent,	
(d)	the purposes for which the instrument provides that development is prohibited within the zone,	See Note 7 – Land Use Table
(e)	whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed,	Yes. Refer to the NSW Planning Portal https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address for details or contact Councils Development section.
(f)	whether the land includes or comprises critical habitat,	No
(g)	whether the land is in a conservation area (however described),	Not in Heritage Conservation Area
(h)	whether an item of environmental heritage (however described) is situated on the land.	Yes - Local Item 146 - Jindabyne Winter Sports Academy
2A	Zoning and land use under State Environmental Planning Policy (Sydney Region Growth Centres) 2006	
To the extent that the land is within any zone (however described) under:		
(a)	Part 3 of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (the 2006 SEPP), or	N/A
(b)	a Precinct Plan (within the meaning of the 2006 SEPP), or	N/A
(c)	a proposed Precinct Plan that is or has been the subject of community consultation or on public exhibition under the Act,	N/A
the particulars referred to in clause 2 (a)–(h) in relation to that land (with a reference to "the instrument" in any of those paragraphs being read as a reference to Part 3 of the 2006 SEPP, or the Precinct Plan or proposed Precinct Plan, as the case requires).		
3	Complying Development	
(1)	The extent to which the land is land on which complying development may be carried out under each of the codes for complying development because of the provisions of clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18 (1) (c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.	The following Codes are not applicable to this land: Housing Code Commercial and Industrial Alterations Code Commercial and Industrial (New Buildings and Additions) Code Container Recycling Facilities Code Low Rise Medium Density House Code The following Codes are applicable to the land and complying development may be carried out on the whole of the land under these Codes: Nil The following Codes are applicable to the land but due to the provisions of clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes)2008 complying development may only be carried out on part of the land under these Codes:

		NIL The following Codes are applicable to the land but due to the provisions of clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes)2008 complying development may not be carried out on any part of the land under these Codes: Rural Housing Code Housing Alterations Code General Development Code Subdivisions Code Demolition Code Fire Safety Code Inland Code
(2)	The extent to which complying development may not be carried out on that land because of the provisions of clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18 (1)(c3) and 1.19 of that Policy and the reasons why it may not be carried out under those clauses.	For the Codes listed above that may only be carried out on part of the land or may not be carried out on any part of the land the reasons why complying development may not be carried out are as follows: The land is wholly affected by specific land exemptions being an Environmental Heritage Item. The land is partially affected by specific land exemptions being land identified as environmentally sensitive land as it is subject to considerations associated with Terrestrial Biodiversity clauses contained in the relevant Local Environmental Plan. If complying development is permitted on only part of the land due to the above restrictions, the extent to which these restrictions apply to the land can be found on the NSW Planning Portal website maps at www.planningportal.nsw.gov.au. These map(s) are based on the legislated maps/s for Cooma-Monaro Local Environmental Plan 2013, Snowy Rover Local Environment Plan 2013 and Bombala Local Environment Plan 2012 and represent the best information Council has on the extent to which the above restrictions affect this land.
(3)	If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.	Not Applicable
		See Note 3 at the end of this Certificate for further information.

4	Repealed	
4A	Repealed	
4B	Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works	
In relation to a coastal council–whether the owner (or any previous owner) of the land has consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act). Note. "Existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the Local Government Act 1993.		N/A
5	Mine subsidence	
Whether or not the land is proclaimed to be a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.		No
6	Road widening and road realignment	
Whether or not the land is affected by any road widening or road realignment under:		
(a)	Division 2 of Part 3 of the Roads Act 1993, or	No
(b)	any environmental planning instrument, or	No
(c)	any resolution of the council.	No
7	Council and other public authority policies on hazard risk restrictions	
Whether or not the land is affected by a policy:		
(a)	adopted by the council, or	No (see Note below)
(b)	adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council,	Council has been advised by the NSW Department of Planning that in accordance with section 4.14 of the Environmental Planning and Assessment Act 1979 Council is required to be satisfied that a development complies with 'Planning for Bushfire Protection 2019' where that development is within land identified as bushfire prone.
that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding),		
Note: Council has recently been provided with mapping information from the Department of Industry – Resources and Energy in conjunction with the NSW Governments Heads of Asbestos Coordination Authorities (HACA) in relation to the presence of 'Naturally Occurring Asbestos' (NOA) within the Shire. The HACA has also published information on what can be done to avoid contact with NOA. This information can be viewed at http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/safety-and-health/topics/NOA where there is a link to mapping and other information. The HACA has also published information on what can be done to avoid contact with NOA. Council has adopted an Asbestos Policy which includes provisions applicable to NOA. Council was not aware of the presence of NOA in the Shire when this Policy was adopted, and has no knowledge of any confirmed NOA sites. However following receipt of the mapping information Council is currently in the process of developing risk controls, guidance materials and an asbestos management plan in accordance with the adopted Asbestos Policy. The confirmed presence of naturally occurring asbestos on a site may result in restrictions being imposed upon future development of the site in accordance with the provisions of the Asbestos Policy.		
7A	Flood related development controls information	
(1)	Whether or not development on that land or	Not on Flood Prone Land - the land and access thereto is

part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls.	flood free and any development of the land will not suffer damage by flooding to a level anticipated in a 1 in 100 year storm event or will not adversely affect properties adjoining and in the locality by reason of the displacement, redirection or increased velocity of flood waters in accordance with the New South Wales Government "Floodplain Development Manual" (2005)
(2) Whether or not development on that land or part of the land for any other purpose is subject to flood related development controls.	No - the land and access thereto is flood free and any development of the land will not suffer damage by flooding to a level anticipated in a 1 in 100 year storm event or will not adversely affect properties adjoining and in the locality by reason of the displacement, redirection or increased velocity of flood waters in accordance with the New South Wales Government "Floodplain Development Manual" (2005)
(3) Words and expressions in this clause have the same meanings as in the standard instrument set out in the Standard Instrument (Local Environmental Plans) Order 2006.	
8 Land reserved for acquisition	
Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.	Council has not been advised that any environmental planning instrument or proposed environmental planning instrument applying to the land provides for the acquisition of the land by a public authority as referred to in section 3.15 of the Act
9 Contributions plans	
The name of each contributions plan applying to the land.	Snowy River Shire Council Section 7.11 Contributions Plan 2008 Snowy River Shire Council Section 7.11 Contributions Plan 2010 - Shared Trails
9A Biodiversity certified land	
If the land is biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016, a statement to that effect.	No
Note: Biodiversity certified land includes land certified under Par 7AA of the Threatened Species Conservation Act 1995 that is taken to be certified under Part 8 of the Biodiversity Conservation Act 2016.	
10 Biodiversity stewardship sites	
If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the Biodiversity Conservation Act 2016, a statement to that effect (but only if the council has been notified of the existence of the agreement by the Chief Executive of the Office of Environment and Heritage).	No
Note: Biodiversity stewardship agreements include biobanking agreements under Part 7A of the Threatened Species Conservation Act 1995 that are taken to be biodiversity stewardship agreements under Part 5 of the Biodiversity Conservation Act 2016.	
10A Native vegetation clearing set asides	
If the land contains a set aside area under section 60ZC of the Local Land Services Act 2013, a statement to that effect (but only if the council has been notified of the existence of the set aside area by Local Land Services or it is registered in the public register under that section).	No
11 Bush fire prone land	
If any of the land is bush fire prone land (as defined in	Not bushfire prone land.

the Act), a statement that all or, as the case may be, some of the land is bush fire prone land. If none of the land is bush fire prone land, a statement to that effect.	Information relied on to answer the above question has been provided to Council by the NSW Rural Fire Service, for more information regarding the above information please contact the NSW Rural Fire Service. (www.rfs.nsw.gov.au) Please see Public Notice Bush Fire Prone Lands Mapping Update at the end of this certificate.
12 Property vegetation plans	
If the land is land to which a property vegetation plan under Part 4 of the Native Vegetation Act 2003 (and that continues in force) applies, a statement to that effect (but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act).	No PVP applicable
13 Orders under Trees (Disputes Between Neighbours) Act 2006	
Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land (but only if the council has been notified of the order).	No
14 Directions under Part 3A	
If there is a direction by the Minister in force under section 75P (2) (c1) of the Act 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, a statement to that effect identifying the provision that does not have effect.	No
15 Site compatibility certificates and conditions for seniors housing	
If the land is land to which State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 applies:	
(a) a statement of whether there is a current site compatibility certificate (seniors housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:	No
(i) the period for which the certificate is current, and	N/A
(ii) that a copy may be obtained from the head office of the Department, and	N/A
(b) a statement setting out any terms of a kind referred to in clause 18(2) of that Policy that have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.	N/A
16 Site compatibility certificates for infrastructure, schools or TAFE establishments	
A statement of whether there is a valid site compatibility certificate (infrastructure), or site compatibility certificate (schools or TAFE establishments) of which the council is aware, in	No

respect of proposed development on the land and, if there is a certificate, the statement is to include:	
(a) the period for which the certificate is valid, and	N/A
(b) that a copy may be obtained from the head office of the Department.	N/A
17 Site compatibility certificates and conditions for affordable rental housing	
(1) A statement of whether there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land and, if there is a certificate, the statement is to include:	No
(a) the period for which the certificate is current, and	N/A
(b) that a copy may be obtained from the head office of the Department.	N/A
(2) A statement setting out any terms of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 that have been imposed as a condition of consent to a development application in respect of the land.	N/A
18 Paper subdivision information	
(1) The name of any development plan adopted by a relevant authority that applies to the land or that is proposed to be subject to a consent ballot.	No
(2) The date of any subdivision order that applies to the land.	No
(3) Words and expressions used in this clause have the same meaning as they have in Part 16C of this Regulation.	No
19 Site verification certificates	
A statement of whether there is a current site verification certificate, of which the council is aware, in respect of the land and, if there is a certificate, the statement is to include:	No
(a) the matter certified by the certificate, and Note. A site verification certificate sets out the Secretary's opinion as to whether the land concerned is or is not biophysical strategic agricultural land or critical industry cluster land-see Division 3 of Part 4AA of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007	N/A
(b) the date on which the certificate ceases to be current (if any), and	N/A
(c) that a copy may be obtained from the head office of the Department.	N/A
20 Loose-fill asbestos insulation	
If the land includes any residential premises (within	Council is not aware of any residential dwelling erected

the meaning of Division 1A of Part 8 of the Home Building Act 1989) that are listed on the register that is required to be maintained under that Division, a statement to that effect.	on this land which has been identified in the Loose-Fill Asbestos Insulation Register as containing loose fill asbestos ceiling insulation. Contact NSW Fair Trading if further information is required.
21 Affected building notices and building product rectification orders	
(1) A statement of whether there is any affected building notice of which the council is aware that is in force in respect of the land.	No affected building notice.
(2) A statement of:	
(a) whether there is any building product rectification order of which the council is aware that is in force in respect of the land and has not been fully complied with, and	No building product rectification order.
(b) whether any notice of intention to make a building product rectification order of which the council is aware has been given in respect of the land and is outstanding.	No notice of intention to make a building rectification order.
(3) In this clause:	
affected building notice has the same meaning as in Part 4 of the Building Products (Safety) Act 2017.	
building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.	

Note: The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:

(a) that the land to which the certificate relates is significantly contaminated land within the meaning of that Act–if the land (or part of the land) is significantly contaminated land at the date when the certificate is issued,

(b) that the land to which the certificate relates is subject to a management order within the meaning of that Act–if it is subject to such an order at the date when the certificate is issued,

(c) that the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of that Act–if it is the subject of such an approved proposal at the date when the certificate is issued,

(d) that the land to which the certificate relates is subject to an ongoing maintenance order within the meaning of that Act–if it is subject to such an order at the date when the certificate is issued,

that the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act–if a copy of such a statement has been provided at any time to the local authority issuing the certificate.

Contaminated Land

As of the date of this certificate, Council has no records to indicate that the site is potentially contaminated.

It is recommended that you ensure that the land has not in the past been used for certain purposes which could have involved the use of contaminates. A list of potentially contaminating uses is outlined in Attachment "A" to the end of this planning certificate.

Refer to Cooma Monaro Development Control Plan 2014 / Snowy River Development Control Plan 2013 / Bombala Development Control Plan 2012 – Planning Guidelines prepared by the Environment Protection Authority and the Department of Urban Affairs and Planning (1998). The guidelines are underpinned by State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55), and the Contaminated Lands Management Act 1987.

In addition, Council has not been made aware of the land being subject to the following:

- land declared to be significantly contaminated land;

- land subject to a management order;
- land subject of an approved voluntary management proposal;
- land subject to an ongoing maintenance order; or
- subject of a site audit statement

IMPORTANT NOTES – SECTION 10.7(2) CERTIFICATE

Note 1 Terms of Reference

This Certificate does not make reference to the physical conditions of the property. Consequently no inspections have been made in respect of:

(a) The presence or otherwise of noxious weeds on the property,
(b) The condition of any structure/s on the land and associated infrastructure.

No advice is included in this Certificate in respect of outstanding or unauthorised works.

Should applicants require such details, that may be in addition to information provided in a S10.7(2) & (5) Certificate, application should be made, accompanied by the appropriate fee for such inspections.

Note 2 Biosecurity (Weeds)

Weeds are a major environmental threat to the Snowy Monaro Region's agricultural and environmental assets. People considering purchasing land, particularly rural land, in the Council area are urged to contact Council's Biosecurity (Weeds) team for advice regarding landowners' responsibilities for the control of weeds.

Note 3 Complying Development

- Under the Housing Code complying development may not be carried out on land which has an area less than 200 square metres and has a width, measured at the building line fronting a primary road, of at least 6m.
- Under the Rural Housing Code complying development for the erection of a new single-storey or two-storey dwelling house may only be carried out on land that (a) has an area of at least 80 hectares, or (b) is subject to a restriction created under section 88B of the Conveyancing Act 1919 that specifies a building envelope for the lot and was required by the council.
- As per clause 1.18 of the Codes SEPP Complying Development is only possible on land where the development would otherwise be permissible with or without consent under the Council's Local Environmental Plan applicable to the land.
- Complying development may not be carried out on land outside the zonings identified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, or on a lot which is not entirely within the zoning in the Codes SEPP specified for that particular Complying Development code. Refer to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 for other permissibility criteria.

Note 4 Important Notice for any maps that relate to this certificate

These maps are not a precise survey document. Accurate locations can only be determined by a survey on the ground.

While every care is taken to ensure the accuracy of this data, neither the Snowy Monaro Regional Council nor the Land and Property Management Authority makes any representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason.

Note 5 Coinciding Legal and Practical Access

Purchasers of rural and non-urban land are advised to ensure that coinciding legal and practical access can be gained to the property from a public road.

Note 6 State Environmental Planning Policies

Below is a list of all State Environmental Planning Policies (including publicised draft policies) that apply to Snowy Monaro Regional Council. Depending on circumstances set down in each policy, the policy may be specifically applicable to the land that is the subject of this certificate. You are advised to check the policy for the necessary details.

State Environmental Planning Policy No 19—Bushland in Urban Areas
State Environmental Planning Policy No 21—Caravan Parks
State Environmental Planning Policy No 33—Hazardous and Offensive Development
State Environmental Planning Policy No 36—Manufactured Home Estates
State Environmental Planning Policy No 55—Remediation of Land
State Environmental Planning Policy No 64—Advertising and Signage
State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development
State Environmental Planning Policy No 70—Affordable Housing (Revised Schemes)
State Environmental Planning Policy (Aboriginal Land) 2019
State Environmental Planning Policy (Activation Precincts) 2020
State Environmental Planning Policy (Affordable Rental Housing) 2009
State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
State Environmental Planning Policy (Concurrences and Consents) 2018
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy (Infrastructure) 2007
State Environmental Planning Policy (Koala Habitat Protection) 2019
State Environmental Planning Policy (Kosciuszko National Park—Alpine Resorts) 2007
State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy (Primary Production and Rural Development) 2019
State Environmental Planning Policy (State and Regional Development) 2011
State Environmental Planning Policy (State Significant Precincts) 2005
State Environmental Planning Policy (Urban Renewal) 2010
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

Any enquiries regarding these State policies should be directed to the Department of Planning.

Zone RU1 Primary Production

Without Consent

Environmental protection works; Extensive agriculture; Home occupations

With Consent

Air transport facilities; Airstrips; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Camping grounds; Caravan parks; Cellar door premises; Cemeteries; Charter and tourism boating facilities; Centre-based child care facilities; Community facilities; Crematoria; Depots; Dual occupancies; Dwelling houses; Eco-tourist facilities; Educational establishments; Environmental facilities; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Funeral homes; Garden centres; Helipads; Home-based child care; Home businesses; Home industries; Industrial training facilities; Information and education facilities; Intensive livestock agriculture; Intensive plant agriculture; Jetties; Landscaping material supplies; Mooring pens; Moorings; Open cut mining; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (outdoor); Respite day care centres; Roads; Roadside stalls; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Timber yards; Transport depots; Truck depots; Veterinary hospitals; Water recreation structures; Wharf or boating facilities

Prohibited

Any development not specified in item 2 or 3

Section 10.7(5) Details

Advice on such other relevant matters affecting the land as Council is aware.

Consents Issued – Development Applications/Complying Development Certificates

DA0170/2016 Tree Removal DA4071/2017 New Electric Sign DA4014/2017Tree Removal DA4058/2018 BMX Track DA4178/2020 Alterations to Scullery in Dining Hall DA0045/2020 New Outdoor Recreational Facility - Dry Slope Airbag Facility DA0005/2021 Minor Alts/Adds to Lodges 17-26

On Site Sewage Management System (OSSMS)

Not Applicable

Water & Wastewater

Yes - connection to Council's reticulated water supply #Yes - connected to Council's Sewer system

Biosecurity (Weeds)

Council has not recently inspected this property. St John's wort, Serrated tussock, African lovegrass and Sweet briar are known to occur in the local geographical area. These weeds must be controlled in accordance with Council's Local Weed Management Plans. These plans can be found on Council's website. Further information regarding weed control can be obtained by calling Council's Biosecurity Team on 1300 345 345.

Naturally Occurring Asbestos

No

Village Flood Level (Bredbo & Berridale)

No

Draft Development Control Plan/s

No

Contaminated Lands – Clearance Certificate

Not Applicable

Planning Agreements

No

Conservation Agreement

Not Applicable

ATTACHMENT A' – S10.7(2)

Activities which are likely to have contaminated sites because of their past or present use:

- asbestos works;
- chemical and petrochemical works;
- docks and railway land, especially large sidings and depots;
- gasworks, other local carbonisation plants and ancillary by products works;
- industries making or using wood preservatives;
- installations involving the processing or use of radioactive materials;
- landfills and other waste disposal and storage sites, and transfer sites;
- land heavily treated with chemicals for agricultural or other purposes, eg aerial spraying;
- metal mines, smelters, foundries, iron and steel works, metal finishing works;
- mine tailings dumps (including mineral sands tailings);
- munitions production and testing sites;
- oil refineries, petroleum storage and distributions sites;
- paper and printing works;
- pesticide storage areas, areas where vehicles used for the transport and storage of pesticides are washed, and areas where tanks are used to store pesticides;
- plants and heavy engineering installations, eg shipbuilding and shipbreaking;
- power stations and switching yards etc;
- scrap yards;
- stock dipping, eg sheep, cattle etc;
- tanneries

Public Notice

Bushfire Prone Lands Mapping Update

The NSW Rural Fire Service (RFS) and Snowy Monaro Regional Council have prepared a draft Bush Fire Prone Land (BFPL) Map using new categories identified by the (RFS) and updated vegetation mapping. This has resulted in the majority of the Local Government Area being mapped as bushfire prone land.

This notice has been prepared to inform you of the changes as they may impact plans for developing your property. Also when the new mapping comes into effect you may notice that your land is now identified as bushfire prone in the Section 10.7 Planning Certificate accompanying the sale of your land.

Please note that the revised map is currently in the drafting stage and will be available to the public in the near future. Council expects the draft map to be approved by the NSW RFS in 2019/20.

The new map is necessary because the NSW Rural Fire Service has changed the current two (2) categories BFPL classification system to a three (3) category BFPL classification system. The three (3) new categories are outlined below.

The three categories are defined as follows:

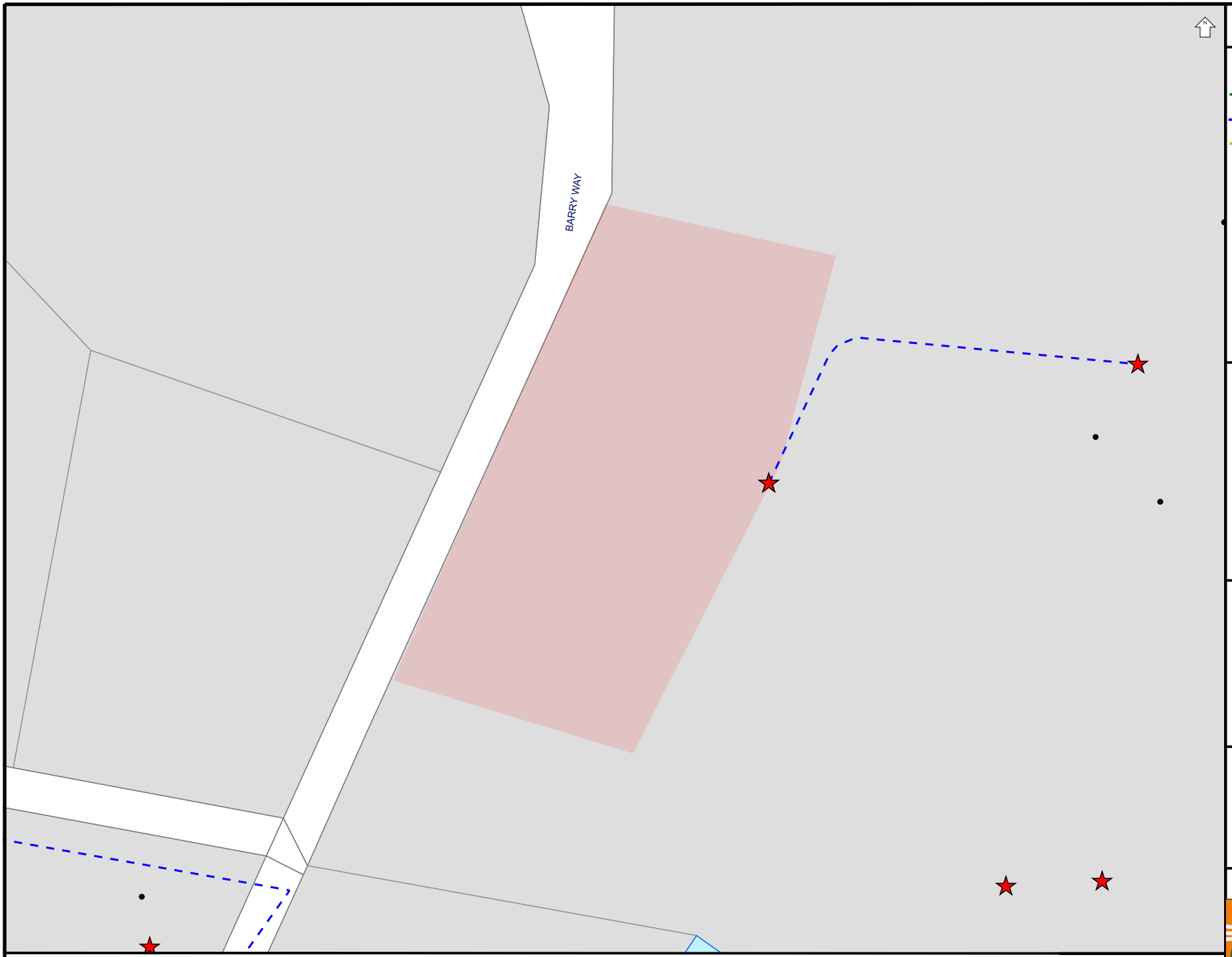
- Vegetation Category 1 is vegetation which is the highest risk for bush fire. It is represented as red on the BFPL Map and will be given a 100m buffer. This vegetation category has the highest combustibility and likelihood of forming fully developed fires including heavy ember production. Examples of Category 1 vegetation include areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations.

- Vegetation Category 2 is considered to be a lower bushfire risk than Category 1 and Category 3 but higher than the excluded areas. It is represented as light orange on a bush fire prone land map and will be given a 30 metre buffer. This vegetation category has lower combustibility and/or limited potential fire size due to the vegetation area shape and size, land geography and management practices. Examples of category 2 vegetation include rainforests and lower risk vegetation parcels.

- Vegetation Category 3 is considered to be medium bush fire risk vegetation. It is higher in bush fire risk than category 2 (and the excluded areas) but lower than Category 1. It is represented as dark orange on a Bush Fire Prone Land map and will be given a 30 metre buffer. Examples of Category 3 vegetation include Grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands.

Any development (including minor works) on properties impacted by the BFPL mapping will require an assessment under Planning for Bushfire Protection Guidelines and relevant construction standards.

Snowy Monaro Regional Council offer planning services to the community including a duty planner available on weekdays and pre-lodgement meetings to discuss planning implications for larger or more complex proposals. Information on building in bushfire prone areas can be found on the NSW RFS website – see https://www.rfs.nsw.gov.au/resources/publications/building-in-a-bush-fire-area.



Overhead wires not shown
LOOK UP & LIVE!

LEGEND

- LV Underground Cable
- HV Underground Cable
- Underground Pipe
- Underground Earth or Wires
- Ground Substation
- Pole
- Cubicle
- Pit
- Area of Interest

Critical Assets

Contact Essential Energy on 13 23 91

- Zone Substation
- Underground Cable
- Underground Fibre

Proposed Works

- Area of proposed works

Proposed assets are shown as orange symbols

THE INFORMATION ON THIS MAP MAY NOT BE ACCURATE. If details are incorrect, please notify Essential Energy on 13 23 91 (or fax 1800 354 636)

ISSUE DATE: 01/04/2021

You must resubmit your request if you have not started work within 4 weeks of the 'Issue Date' above

A4 | SCALE: 1:2498

Job Number: 21368208 Sequence number: 108245263 Job location: Barry Way, Jindabyne

Map Centre: 148° 36' 36.7", -36° 25' 52.9"

essential energy

Job No 21368208

Phone: 1100
www.1100.com.au

Caller Details

Contact:	Mrs Fiona Campbell	**Caller Id:**	975560	**Phone:**	0262602788
Company:	Douglas Partners	**Mobile:**	Not Supplied	**Fax:**	0262601147
Address:	Unit 2 73 Sheppard Street Hume ACT 2620	**Email:**	fiona.campbell@douglaspartners.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: 103109
Working on Behalf of: Private

Enquiry Date:	Start Date:	End Date:
01/04/2021	02/04/2021	30/07/2021

Address:
Barry Way
Jindabyne NSW 2627

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

- Check the location of the dig site is correct. If not submit a new enquiry.
- If the scope of works change, or plan validity dates expire, resubmit your 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:

Your Responsibilities and Duty of Care

- The lodgement of an enquiry does not authorise the project to commence. You must obtain all necessary information from any and all likely impacted asset owners prior to excavation.
- 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.

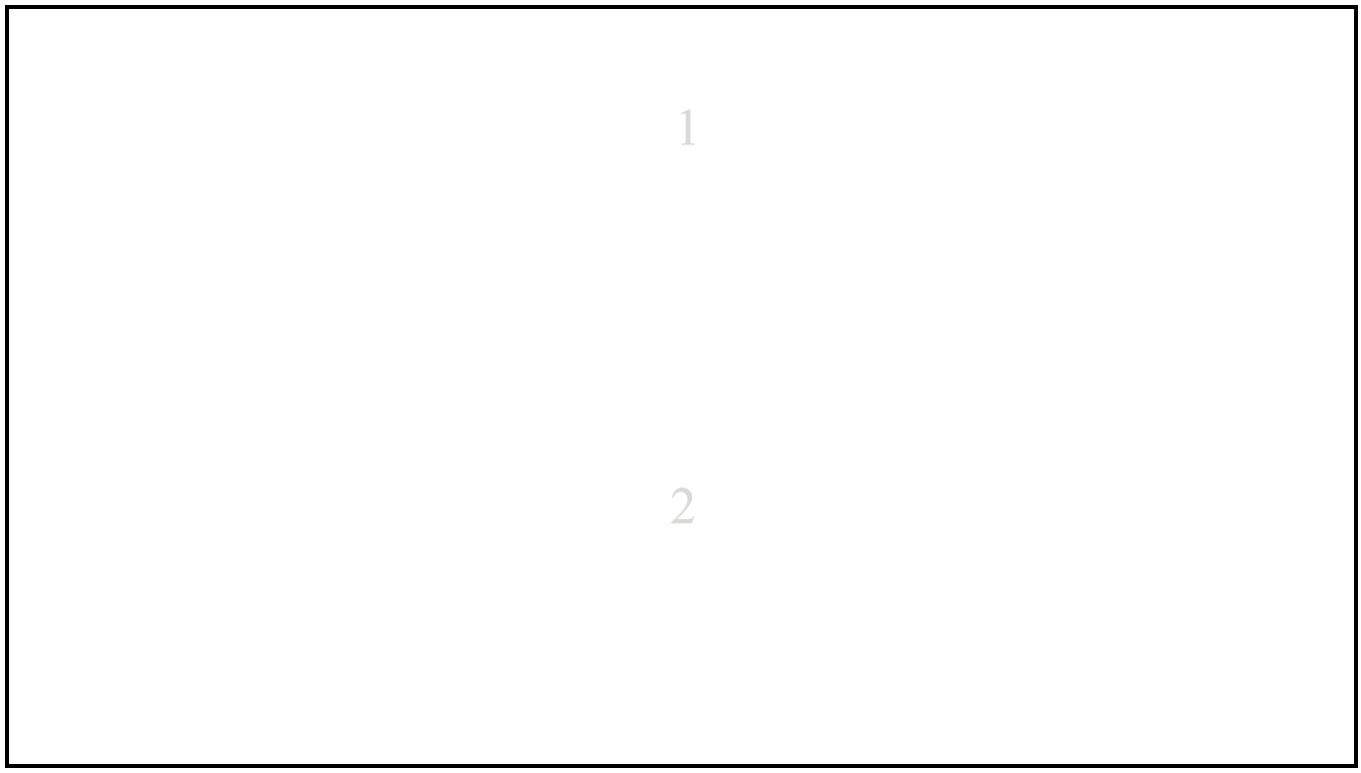
Seq. No.	Authority Name	Phone	Status
108245263	Essential Energy	132391	NOTIFIED
108245265	NBN Co, NswAct	1800626329	NOTIFIED
108245264	Telstra NSW, South	1800653935	NOTIFIED

END OF UTILITIES LIST

To:	Mrs Fiona Campbell
Phone:	Not Supplied
Fax:	0262601147
Email:	fiona.campbell@douglaspartners.com.au

Dial before you dig Job #:	21368208
Sequence #	108245265
Issue Date:	01/04/2021
Location:	Barry Way , Jindabyne , NSW , 2627

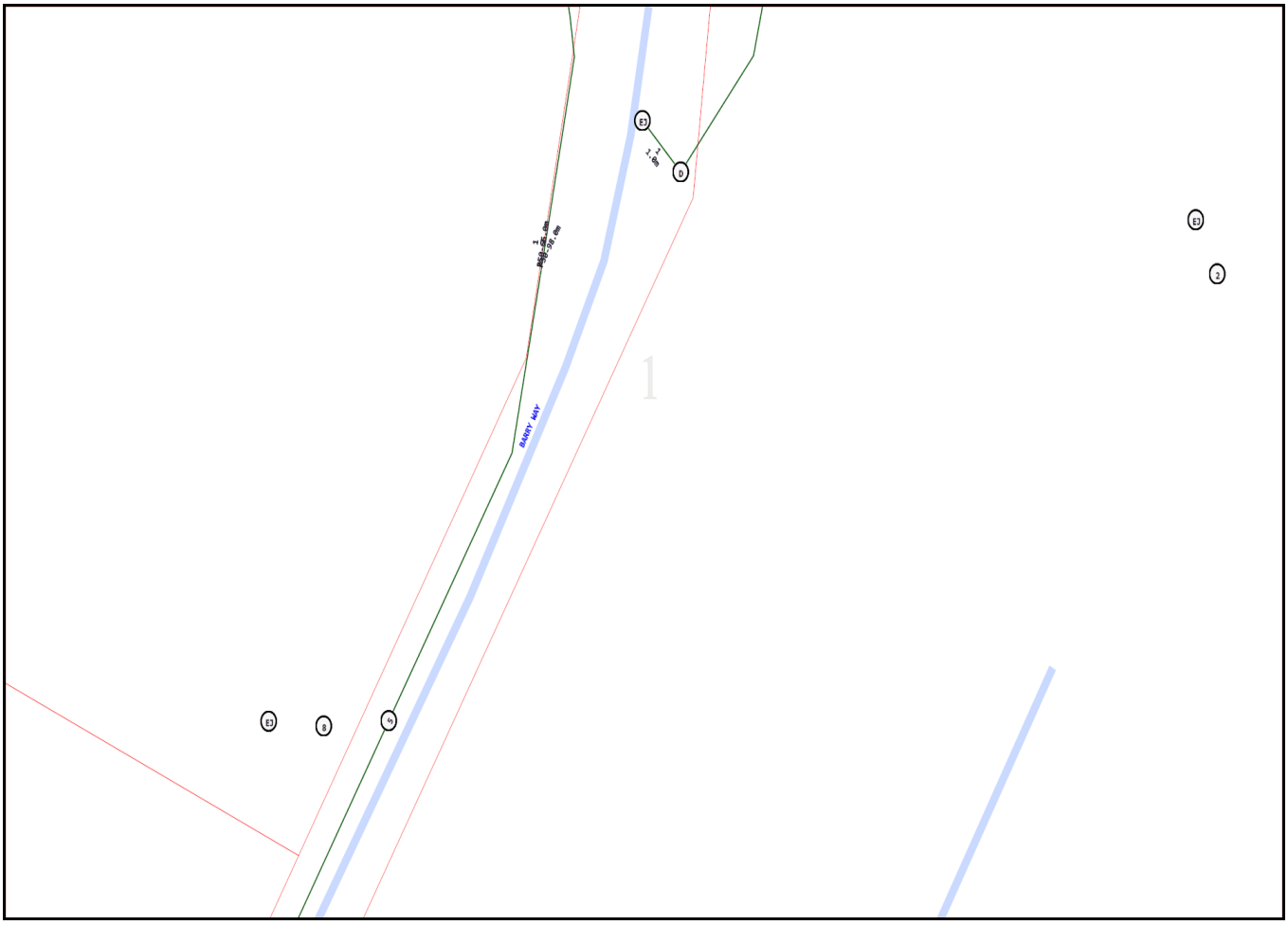
Indicative Plans



LEGEND

34	Parcel and the location
5	Pit with size "5"
2E	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
2 PO – T- 25.0m P40 – 20.0m 5 9	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
2 10.0m 5 9	2 Direct buried cables between pits of sizes ,"5" and "9" are 10.0m apart.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
5 9	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
BROADWAY ST	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m

Email dbyd@nbnco.com.au Web www.nbn.com.au



Level 13, 100 Mount Street, North Sydney NSW 2060

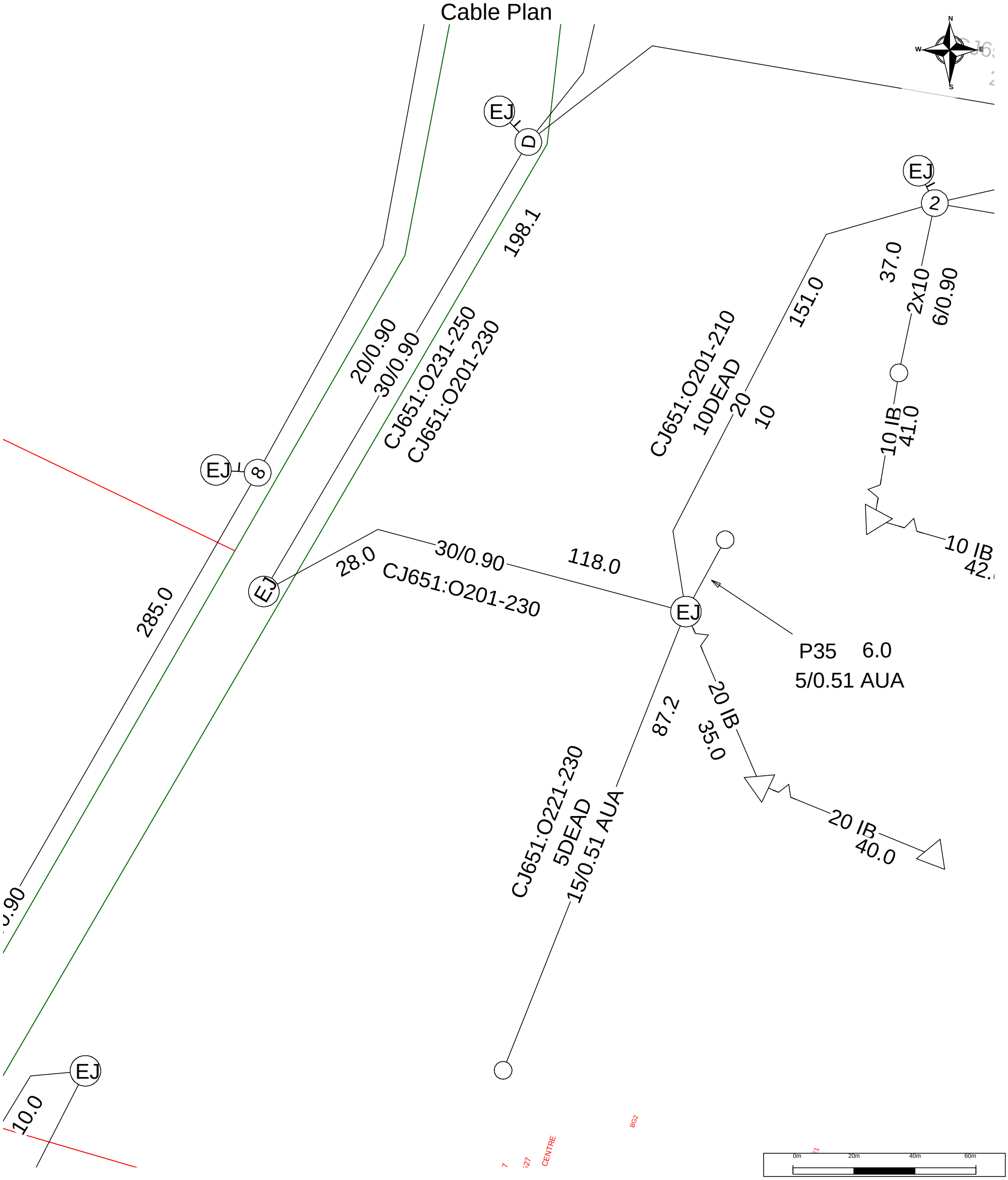
Email dbyd@nbnco.com.au Web www.nbn.com.au

Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Email dbyd@nbnco.com.au Web www.nbn.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 01/04/2021 10:35:04	Sequence Number: 108245264
	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

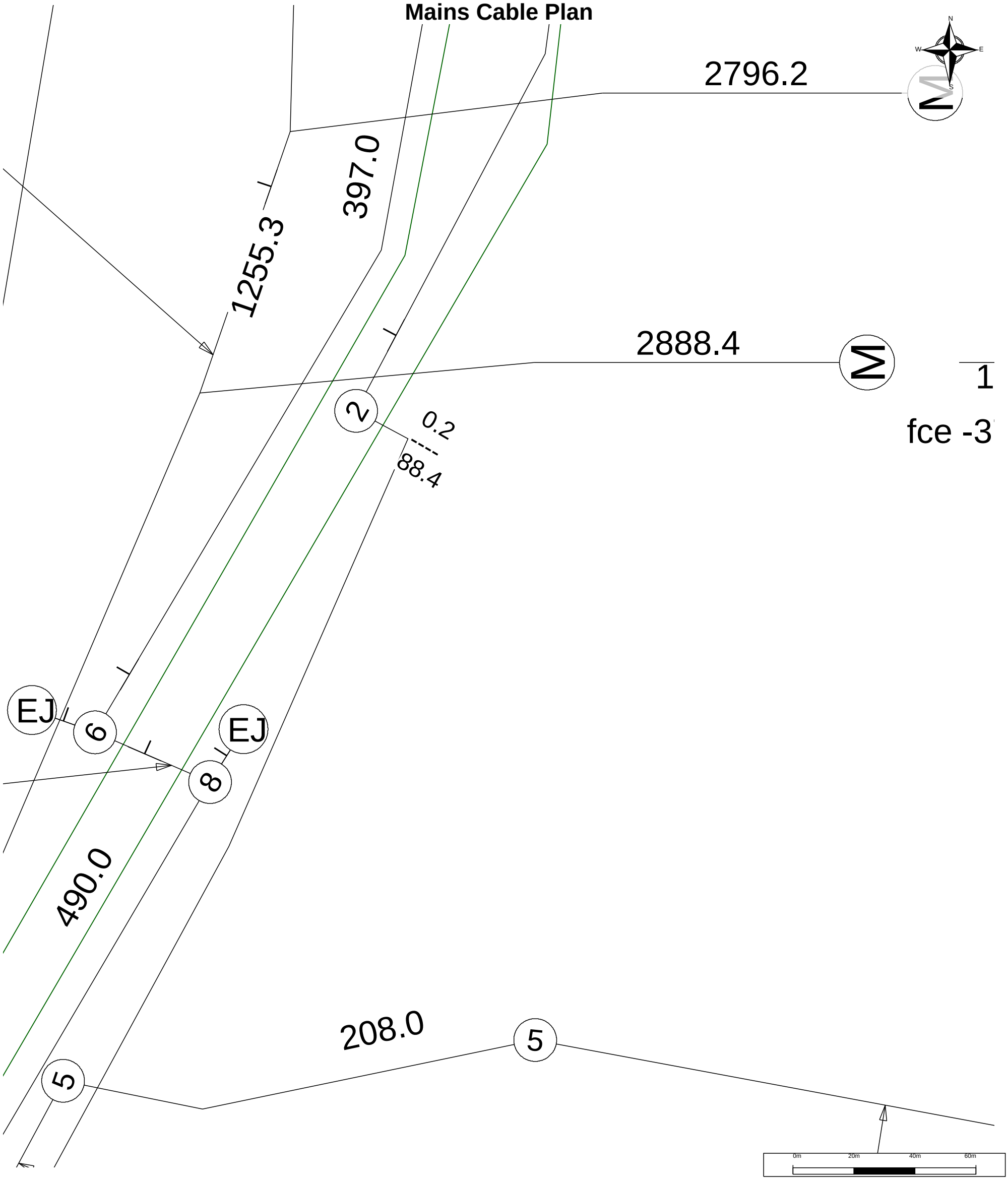
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths 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)	Sequence Number: 108245264
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	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.
Generated On 01/04/2021 10:35:04	

644500 E
645000 E
645500 E
5967500 N
5967000 N
5966500 N

ATHLETE VILAGE
SPORTS CENTRE
STAFF HOUSING
UNITS
ADMIN
MAINTENANCE
REC HALL
DINING HALL
STUDENT LODGES

76.83
56.33
90.51
98.11
63.47
68.32
70
125.87
37.03
36.54
194.72
195.21
41.6
157.92
77.33
129.235
94.02
51.38
116.01
148.44
240.25
366.45
197.22
68.105
71.58
100.69
94.55
73.375
73.375
271.12
222.915
345.46

100
DP1019527

101
DP1019527

80
1
DP880706

BM NAIL IN BITUMEN RL 957.05
BM NAIL IN BITUMEN RL 994.67

EASEMENT OVER EXISTING SEWERAGE MAIN TO DRAIN SEWAGE 6 WIDE (DP1019527)
CENTRE OF EASEMENT
RIGHT OF CARRIAGEWAY 10 WIDE (DP880706)
BARRY WAY
BANK OF CREEK
IS BOUNDARY
DP880706
BY

(A) EASEMENT TO SUPPLY WATER 3 WIDE (DP880706)
(B) EASEMENT TO PUMP SEWAGE 3 WIDE (DP880706)
(C) EASEMENT TO SUPPLY WATER & PUMP SEWAGE 6 WIDE (DP880706)
(D) EASEMENT TO SUPPLY WATER 3 & 6 WIDE (DP1019527)
(E) EASEMENT FOR RISING SEWER MAIN 5 WIDE (5292739)

NOTES :

* THIS DETAIL SURVEY IS NOT A 'SURVEY' AS DEFINED BY THE SURVEYING ACT,2002.
* DISTANCES ARE BY TITLE AND ARE SUBJECT TO SURVEY INVESTIGATION
* THE POSITION OF IMPROVEMENTS IN RELATION TO BOUNDARIES IS DIAGRAMMATIC ONLY
* BUILDING POSITIONS ARE APPROXIMATE ONLY
* NOT ALL SERVICES ARE SHOWN
* THE EXISTENCE OF UNDERGROUND SERVICES HAS NOT BEEN ESTABLISHED. IF THESE ARE CRITICAL IT IS ESSENTIAL THE APPROPRIATE AUTHORITIES BE CONTACTED PRIOR TO DEVELOPMENT WORKS.
* EXISTENCE OF SERVICES MUST BE VERIFIED BY CONTACTING DIAL BEFORE YOU DIG (DBYD) PH 1100. CRITICAL SERVICES MUST BE EXPOSED AND LOCATED. (NOT ALL SERVICE PROVIDERS ARE MEMBERS OF DBYD)
* THIS TITLE BLOCK IS AN INTEGRAL PART OF THIS DRAWING WHICH IS NOT TO BE REMOVED
* THIS PLAN SHOULD BE READ IN CONJUNCTION WITH REPORT OF THE SAME REFERENCE

NOTES :

* MAJOR CONTOUR INTERVAL 5m
* MINOR CONTOUR INTERVAL 1m
* CONTOURS ARE INDICATIVE OF SITE TERRAIN ONLY AND WHERE LEVELS ARE CRITICAL FOR DESIGN A MORE DETAILED SURVEY IN THAT AREA IS RECOMMENDED
* RETAINING WALLS AND PEDESTRIAN PATHS EXIST ON SITE AND HAVE NOT BEEN INCLUDED IN THE SURVEY
* NO SERVICE PIT LIDS HAVE BEEN LIFTED
* NO INVERTS HAVE BEEN OBTAINED
* THE CREEK PASSING THROUGH THE SITE HAS NOT BEEN LOCATED AND THE CONTOUR MODEL HAS EXCLUDED THE CREEK
* THE SURVEY IS ON AUSTRALIAN MAP GRID ZONE 55
* ORIGIN OF COORDINATES IS TS390
* LEVELS REFER TO APPROXIMATE AUSTRALIAN HEIGHT DATUM OBTAINED BY GPS METHODS. REFERENCE STATION STROMLOW NSW CORSNET
* NOT ALL RECREATIONAL STRUCTURES HAVE BEEN LOCATED
* INTERNAL FENCING HAS NOT BEEN SHOWN

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LEGEND

ELP - ELECTRIC LIGHT POLE
HYD - HYDRANT
L - STORMWATER LINTEL
MH - MANHOLE
PC - PRAM CROSSING
PP - POWER POLE
SMH - SEWER MANHOLE
SP - SIGN POST
SV - STOP VALVE
TEL - TELSTRA PIT
TL - TRAFFIC LIGHT
SW - STORMWATER
WM - WATER METER

REV	AMENDMENTS	DATE
B	GRID SYSTEM ADDED	23/12/10

SCALE 1:1500
0 50 100 150

SHEET 1 0F 1 - DETAIL SURVEY

CLIENT : NSW SPORT & RECREATION

SURVEYOR :	NATHAN M.
DATUM :	APPROX AUSTRALIAN HEIGHT DATUM
ORIGIN :	SEE NOTE
JOB REF. :	21466
COMPUTER REF. :	21466-FINAL-ISSUEB
DRAWING No.	21466-1
CHECKED :	JONATHAN S
DATE OF SURVEY:	14 AUGUST 2007
REDUCTION RATIO :	1:1500

PLAN OF: JINDABYNE SPORT & RECREATION
207 BARRY WAY
JINDABYNE
BEING: LOT 101 IN DP1019527
SHOWING: GENERAL DETAIL AND SITE LEVELS
PURPOSE: ENGINEERING DESIGN

MACQUARIE PARK
ABN 20 068 433 074
PO Box 4004 MACQUARIE CENTRE NSW 2113
SUITE 404, LEVEL 4 No13-15 LYON PARK ROAD,
MACQUARIE PARK NSW 2113
PHONE : 9888 3848 FAX : 9888 3875
email: office@projectsurveyors.com.au
www.projectsurveyors.com.au
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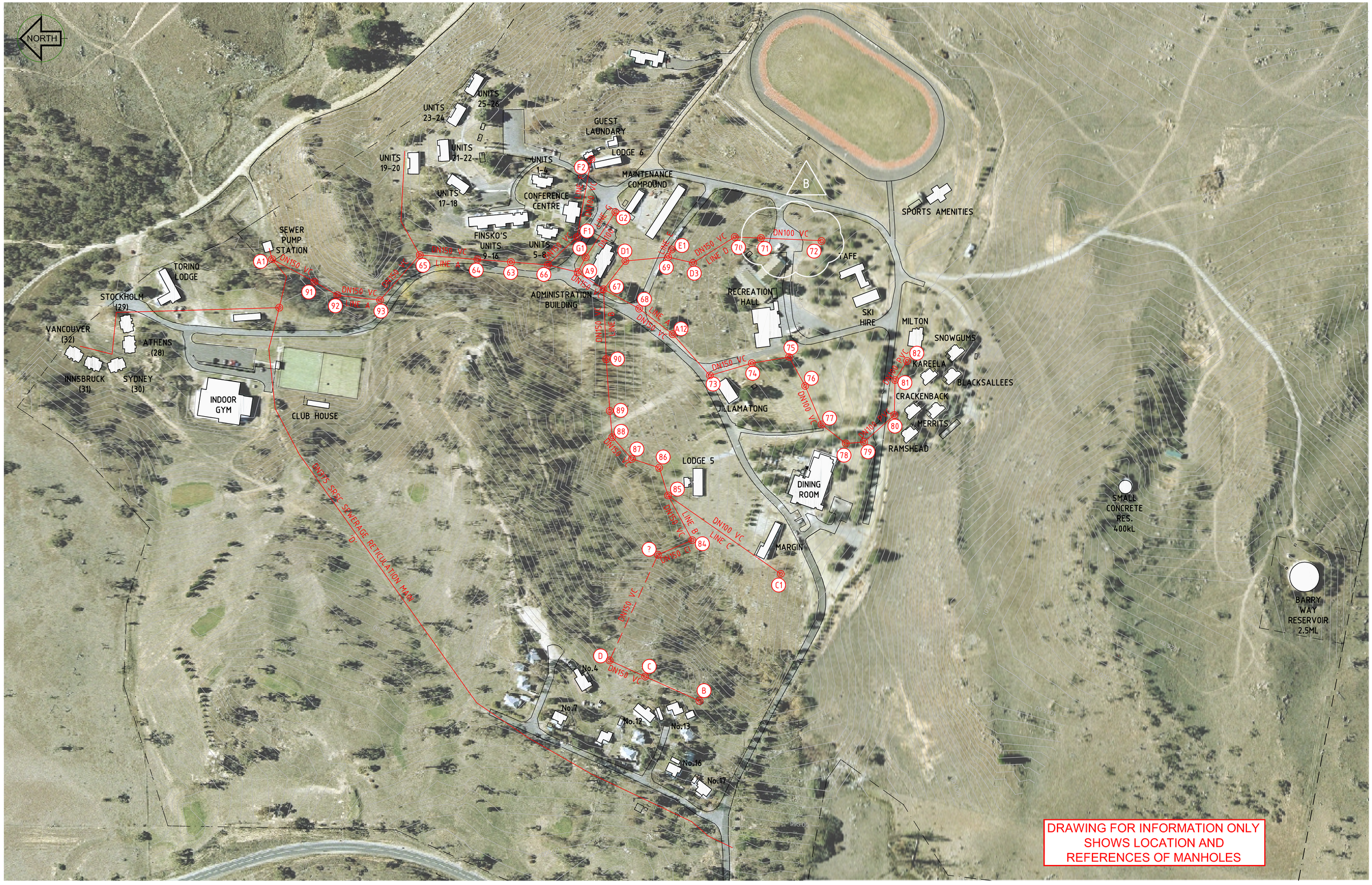
A0



DRAWING FOR INFORMATION ONLY
SHOWS LOCATION AND
REFERENCES OF MANHOLES

Rev	Date	By	App	Amendment Details
B	25.02.2011	RB	BE	REVISED AS PER TENDER MEETING COMMENTS
A	11.02.2011	RB	BE	ISSUED FOR INFORMATION

Design		
Drawn	R. BETTIS	10.02.2011
Design Check		
Drafting Check		
Final Approval		
Azimuth: MGA	Datum: AHD	

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ARTARMON, NSW, 2064, AUSTRALIA
TEL: (02) 8925 5500
FAX: (02) 8925 5555

NSW GOVERNMENT Communities Sport & Recreation

Project: JINDABYNE SPORTS AND RECREATION FACILITY

Drawing Title: EXISTING SEWER SYSTEM LAYOUT PLAN

Project No.: 43167813

Drawing No.: SEW_G001

Status: INFORMATION

Scale (A1): 1:1500

Rev: B

NORTH

DP1019527
LOT 100

DP1019527
LOT 101

DP880706
LOT 1

H01 H02 H03 H04 H05 H06 H07 H08 H09 H10 H11 H12 H13 H14 H15 H16 H17 H18 H19 H20 H21 H22 H23 H24 HR

A HIGH RISK WORK ZONE

B MEDIUM RISK WORK ZONE

C LOW RISK WORK ZONE

SAFETY RISK - WORK ZONES

NOT FOR CONSTRUCTION

-30 0 30 60 90 120
SCALE 1:1500
SCALE 1:3000 - ON A3 SHEET

Rev	Date	By	App	Amendment Details
D	9/05/2011	RB	KD	POTABLE WATER RETICULATION LINE ADDED
C	11.02.2011	RB	BE	ISSUED FOR TENDER
B	25.01.2011	RB	BE	REVISED AS PER CLIENTS COMMENT
A	21.12.2010	RB	BE	ISSUED FOR INFORMATION

Design	B. ECCLES	9.12.2010
Drawn	R. BETTIS	9.12.2010
Design Check	B. HAWKESWOOD	25.01.2011
Drafting Check	B. ECCLES	10.02.2011
Final Approval		
Azimuth	MGA	
Datum	AHD	

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NSW GOVERNMENT Communities Sport & Recreation

Project: JINDABYNE SPORTS AND RECREATION FACILITY

Drawing Title: WATER RETICULATION GENERAL SITE OVERVEIW

Project No.: 43167813

Drawing No.: WAT_M100

Status: TENDER

Scale (A1): 1:1500

Rev: D

CENTRE OF EASEMENT

STAFF HOUSING

PILLAR

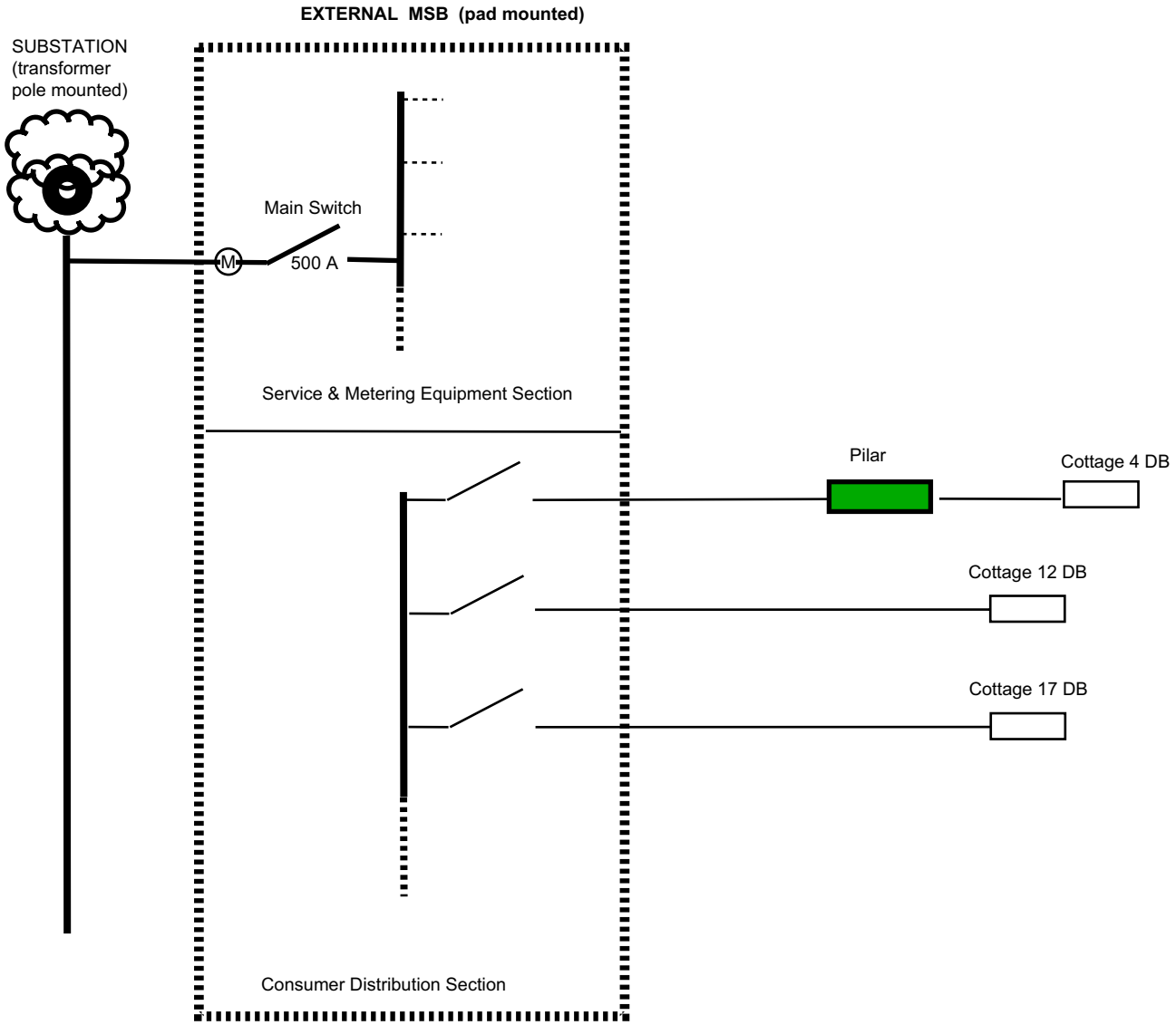
MSB - external

SUBSTATION
(pole transformer)

BM NAIL
IN BITUMEN
RL 994.67

366.45

MARGIN L
MSB



	DRAWN : MILAN S. DATE 16.07.2012 APPRVD: DATE	**JINDABYNE SPORT & RECREATION CENTRE** **POWER DISTRIBUTION DIAGRAM** **STAFF HOUSING MDB**	NSW GOVERNMENT Public Works

SIZE : A3	SCALE :	
SHT	DRAWING NUMBER	AMD

PRELIMINARY ONLY
DO NOT USE FOR TENDER PURPOSES

No.	REVISION/ISSUE	DATE	BY	CHECKED
2	SMHe AMENDED.	14.08.07	NPT	AGS
1	ISSUED FOR INFORMATION & REVIEW	15.08.07	NPT	AGS

THCS
48 COLBEE COURT
PHILLIP ACT. 2606
PH: (02) 6285 2599
FX: (02) 6285 3817
WEB: www.thcs.com.au
BUILDING HYDRAULIC SERVICES CONSULTANTS
THCS (ACT) PTY LTD (A.B.N. 32 124 972 390)

PROJECT
JINDABYNE SPORT & RECREATION CENTRE. PROPOSED STAFF ACCOMMODATION SITE.

DRAWING
HYDRAULIC SERVICES
INDICATIVE LOCATION OF SANITARY & WATER MAINS

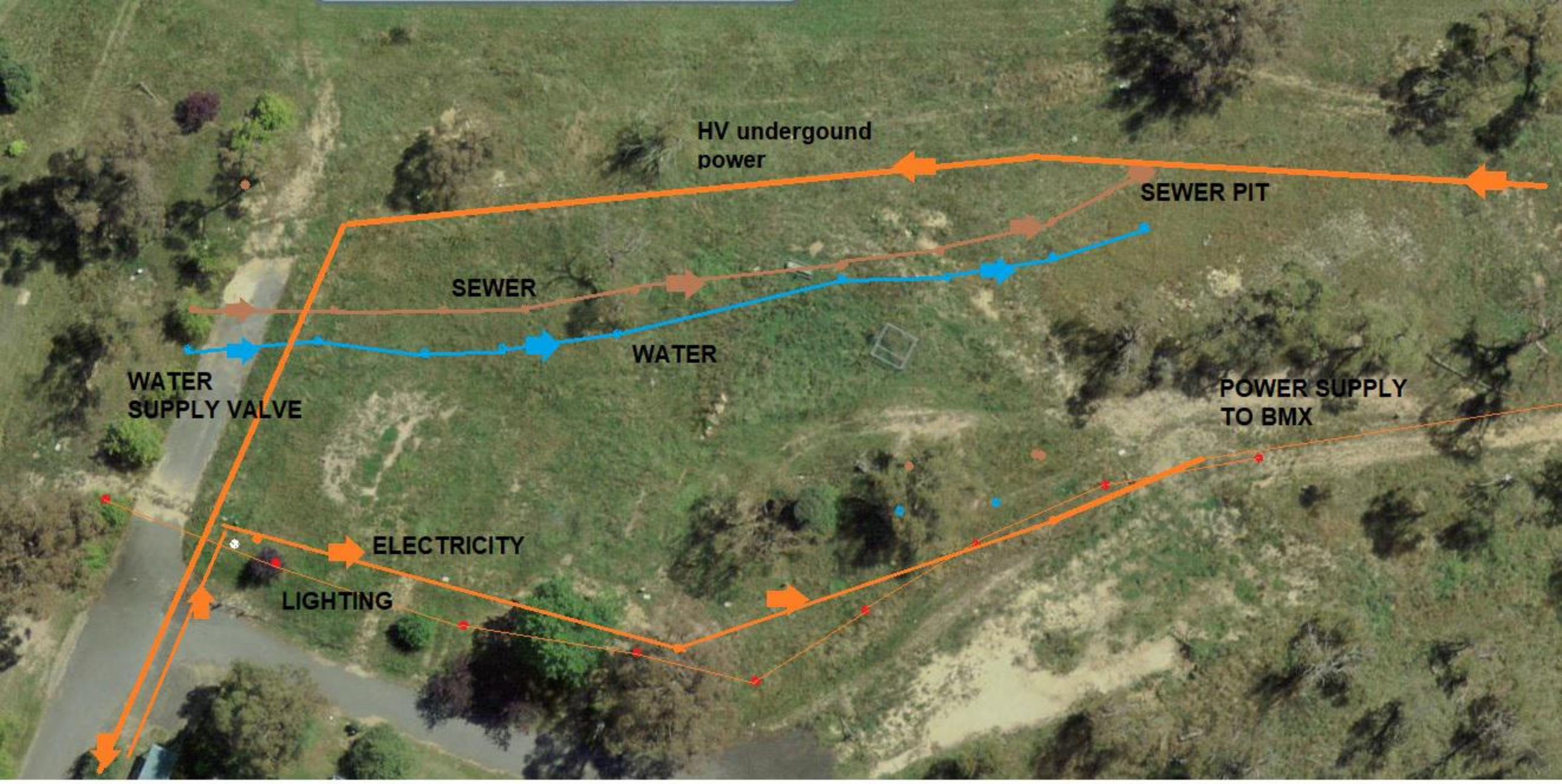
DRAWN	DESIGNED	CHECKED
AGS	NPT	

File Name: 71795-HW1.DWG
Plot Date: 8/16/2007 9:47 AM

DATE: August '07
SCALE: 1:500 @ A1, 1:1000 @ A3

PROJECT	DWG No.	REV	STATUS
71795	H01	2	PRELIMINARY

A1 SHEET


HV undergound
power
SEWER PIT
SEWER
WATER
WATER
SUPPLY VALVE
POWER SUPPLY
TO BMX
ELECTRICITY
LIGHTING

NORTH

H01

No.4

AIR VALVE

AIR VALVE

No.7

No.12

No.13

SERVICE CONNECTION
COTTAGE 12

H02

No.16

H03

SERVICE CONNECTION
COTTAGE 17

No.17

MEDIUM HAZARD BACKFLOW PREVENTION ASSEMBLY POSITIONED ABOVE GROUND. TYPICAL DETAL REFER TO DRG WAT_M201

UPPER GOLF COURSE
FEED CONNECTION

CONTINUED ON DRAWING WAT_M111

NOTES:

1. FOR REFERENCE DRAWINGS, SEE DRG NO. 43167813–WAT–M001.
2. FOR DRAWING NOTES AND REFERENCE STANDARDS, SEE DRG NO. 43167813–WAT–M002
3. ALL NEW PIPE WORK IN APPROXIMATE LOCATIONS SHOWN ON THE DRAWINGS TO SUIT SITE CONDITIONS IN ACCORDANCE WITH WSA 03–2002 AND RELEVANT AUSTRALIAN STANDARDS.
4. UNLESS NOTED OTHERWISE, ALL PIPE WORK BURIED IN TRENCH IN ACCORDANCE WITH THE TYPICAL DETAILS SHOWN ON DRG NO. 43167813–WAT– M202. ALL MINIMUM CLEARANCES ARE MAINTAINED.
5. INSTALLATION OF FITTINGS AND CONNECTIONS IN ACCORDANCE WITH THE TYPICAL DETAILS SHOWN ON DRG NO. 43167813–WAT–M201.
6. CONTRACTOR WAE DWGS FROM SURVEY OF THE FINAL LOCATION OF PIPEWORK CONFIRMED PRIOR TO BACKFILLING.
7. FUTURE EXCAVATIONS – WHERE UNCERTAINTY ARISES, LIAISE WITH THE NSW SPORT & REC. SUPERINTENDENT BEFORE PROCEEDING WITH EXCAVATION / WORKS.

LEGEND

FIBRE OPTIC CABLING AND UNMARKED GAS MAINS LOCATED IN AREA OF WORKS

WORKS AS EXECUTED C/No.1201303

TWS
30 Lawson Street
Blayney NSW 2799
p 02 6368 3455

-5 0 5 10 15 20
SCALE 250
SCALE 500 – ON A3 SHEET

Rev	Date	By	App	Amendment Details
D	25.02.2011	RB	BE	REVISED AS PER TENDER MEETING COMMENTS
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B	25.01.2011	RB	BE	REVISED AS PER CLIENTS COMMENTS
A	21.12.2010	RB	BE	ISSUED FOR INFORMATION

Design	B. ECCLES	9.12.2010
Drawn	R. BETTIS	9.12.2010
Design Check	B. HAWKESWOOD	25.01.2011
Drafting Check	B. ECCLES	10.02.2011
Final Approval		
Azimuth	Datum	

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NSW GOVERNMENT Communities Sport & Recreation

Project: JINDABYNE SPORTS AND RECREATION FACILITY

Drawing Title: WATER RETICULATION GENERAL ARRANGEMENT PLAN SHEET 12 OF 15

Status: STG2 WAE

Project No.: 43167813

Drawing No.: WAT_M112

Scale (A1):

Rev: E

NORTH

DP1019527
LOT 100

DP1019527
LOT 101

DP880706
LOT 1

H01 H02 H03 H04 H05 H06 H07 H08 H09 H10 H11 H12 H13 H14 H17 H18 H19 H20 H21 H22 H23 H24 FIREHOSE

WORKS AS EXECUTED C/No.1201303

TWS
30 Lawson Street
Blayney NSW 2799
p 02 6368 3455

-30 0 30 60 90 120
SCALE 1500
SCALE 1000 – ON A3 SHEET

Rev	Date	By	App	Amendment Details
G	14.02.13			STAGE 2 WORKS
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C	11.02.2011	RB	BE	ISSUED FOR TENDER
B	25.01.2011	RB	BE	REVISED AS PER CLIENTS COMMENT
A	21.12.2010	RB	BE	ISSUED FOR INFORMATION

Design	B. ECCLES	9.12.2010
Drawn	R. BETTIS	9.12.2010
Design Check	B. HAWKESWOOD	25.01.2011
Drafting Check	B. ECCLES	10.02.2011
Final Approval		
Azimuth	Datum	

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NSW GOVERNMENT Communities Sport & Recreation

Project
JINDABYNE SPORTS AND RECREATION FACILITY

Drawing Title
WATER RETICULATION GENERAL SITE OVERVEIW

Project No.
43167813

Drawing No.
WAT_M100

Status
STG2 WAE

Scale (A1)

Rev G

Appendix D

Historical Aerial Photographs (D1 to D8)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 1962** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra / DRAWN BY: SDG		PLATE No: D1
	SCALE: NTS / DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 1979** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra DRAWN BY: SDG		PLATE No: D2
	SCALE: NTS DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 1988** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra / DRAWN BY: SDG		PLATE No: D3
	SCALE: NTS / DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 1992** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra / DRAWN BY: SDG		PLATE No: D4
	SCALE: NTS / DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 1998** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra DRAWN BY: SDG		PLATE No: D5
	SCALE: NTS DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 2003** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra DRAWN BY: SDG		PLATE No: D6
	SCALE: NTS DATE: 29.11.2021		REVISION: 4

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: School Infrastructure NSW (SINSW)	TITLE: **Aerial Photograph 2013** **Proposed Jindabyne Central School** **Part Lot 101 DP1019527, Jindabyne**	PROJECT No: 103109.03
	OFFICE: Canberra / DRAWN BY: SDG		PLATE No: D7
	SCALE: NTS / DATE: 29.11.2021		REVISION: 4

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT: School Infrastructure NSW (SINSW)		
OFFICE: Canberra	DRAWN BY: SDG	
SCALE: NTS	DATE: 29.11.2021	

TITLE: **Aerial Photograph 2018**
Proposed Jindabyne Central School
Part Lot 101 DP1019527, Jindabyne

N

PROJECT No:	103109.03
PLATE No:	D8
REVISION:	4

Appendix E

Site Photographs

Photo 1: General view of the southern portion of the site, looking east

Photo 2: View of a former golf green, looking west

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	1
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 3: View of the site's only structure and a potential fill pad, looking south

Photo 4: View of a former tee-off area/fill pad located at Pit 24

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	2
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 5: View of the south central portion of the site and tee-off area, looking west

Photo 6: General view of the central portion of the site, looking south-east

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	3
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 7: View of an area of fill located along the central western boundary of the site

Photo 8: View of on-site services, possibly associated with former dwellings

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	4
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 9: General view of the eastern portion of the site, looking east

Photo 10: General view of the central portion of the site, looking south-west

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	5
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 11: View of a former tee-off area/fill pad located at Pit 16

Photo 12: View of fill area, located to the left of the silt fence and Pit 20

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	6
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 13: View of the ski-jump construction site

Photo 14: View of brick fragments and PACM within the south-east portion of the site

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	7
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Photo 15: View of the south-east portion of the site, looking south

Photo 16: View of a previous golf green, located at Pit 12

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	103109.03
	Part Lot 101 DP 1019527	Plate	8
	Jindabyne	REV:	4
	Client: School Infrastructure New South Wales (SINSW)	DATE:	21.07.2021

Appendix F

Data Quality Objectives

Appendix F
Data Quality Objectives
Part Lot 101, DP1019527, Jindabyne

F1.0 Data Quality Objectives

The Limited Intrusive Contamination Investigation has been devised broadly in accordance with the seven-step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [the 'NEPM']* (NEPC, 2013).

Step	Summary
1: State the problem	It is noted that the preliminary site investigation (contamination) with limited sampling (PSI-L) was undertaken concurrently with a geotechnical investigation. As such the investigation locations were primarily intended to target areas of the proposed development for geotechnical purposes with opportunistic sampling for contaminated land investigation purposes and some targeting of the potential areas of environmental concern (PAEC) identified in Section 7. As such, the objective of the limited intrusive investigation for contamination is to provide preliminary sub-surface information, to assist in determining the compatibility of the site for the proposed development and whether further investigation and/or management is required. The report is being undertaken as the land is to be redeveloped. The requirements of the regulator, Snowy Monaro Regional Council, will also be considered by consulting their Development Control Plan (DCP), Local Environment Plan (LEP), Secretary's Environmental Assessment Requirements (SEARs) and any other requirements based on our recent experience with Council on similar sites. A preliminary conceptual site model (CSM) was prepared as part of PSI-L (Sections 9 & 13.3). This has been revised to reflect the findings of the limited intrusive investigation. The project team consisted of experienced environmental engineers and scientists working in the roles of Project Principal, Project Reviewer, Project Manager, Field staff.
2: Identify the decisions / goal of the study	The PSI-L identified possible contaminating previous uses which are identified in the CSM (Section 9). The CSM identifies the associated contaminants of potential concern (CoPC) and the likely impacted media. The site assessment criteria (SAC) for each of the CoPC are detailed in Section 11. The decision is to establish whether or not the results fall below the SAC or whether or not the 95% upper confidence limit of the sample population falls below the SAC. On this basis, an assessment of the site's compatibility from a contamination perspective and whether (or not) further assessment and / or remediation will be derived.
3: Identify the information inputs	Inputs to the investigation will be the results of analysis of samples to measure the concentration of CoPC identified in the CSM (Section 9) at the site using NATA accredited laboratories and methods, where possible. The SAC for each of the CoPC are detailed in Section 11. A photoionization detector (PID) was used on-site to screen soils for VOC. PID readings were used to inform sample selection for laboratory analysis.

Step	Summary
4: Define the study boundaries	The lateral boundaries of the investigation area are shown on Drawing 1, Appendix A. The vertical boundaries are to the extent of contamination impact as determined from the site history assessment and site observations. The assessment is limited to the timeframe over which the field investigation was undertaken. Constraints to the assessment are identified and discussed in the conclusions of the report, Section 14.
5: Develop the analytical approach (or decision rule)	The decision rule is to compare all analytical results with SAC (Section 11, based on NEPC (2013)). Where guideline values are absent, other sources of guideline values accepted by NEPC (2013) shall be adopted where possible. Where a sample result exceeds the adopted criterion, a further site-specific assessment will be made as to the risk posed by the presence of that contaminant(s). Initial comparisons will be with individual results then, where required, summary statistics (including mean, standard deviation and 95% upper confidence limit (UCL) of the arithmetic mean (95% UCL) to assess potential risks posed by the site contamination. Quality control results are to be assessed according to their relative percent difference (RPD) values. For field duplicates, triplicates and laboratory results, RPDs should generally be below 30%; for field blanks and rinsates, results should be at or less than the limits of reporting (NEPC, 2013). The field and laboratory quality assurance assessment is included in Appendix L.
6: Specify the performance or acceptance criteria	Baseline condition: Contaminants at the site and/or statistical analysis of data (in line with NEPC (2013)) exceed human health and environmental SAC and poses a potentially unacceptable risk to receptors (null hypothesis). Alternative condition: Contaminants at the site and statistical analysis of data (in line with NEPC (2013)) complies with human health and environmental SAC and as such, does not pose a potentially unacceptable risk to receptors (alternative hypothesis). Unless conclusive information from the collected data is sufficient to reject the null hypothesis, it is assumed that the baseline condition is true. Uncertainty that may exist due to the above potential decision errors shall be mitigated as follows: As well as a primary screening exercise, the use of the 95% UCL as per NEPC (2013) may be applied, ie: 95% is the defined confidence level associated with the UCL on the geometric mean for contaminant data. The resultant 95%UCL shall subsequently be screened against the corresponding SAC. The statistical assessment will only be able to be applied to certain datasets, such as those obtained via systematic sampling. Identification of areas for targeted sampling will be via professional judgement and errors will not be able to have a probability assigned to them.
7: Optimise the design for obtaining data	As the purpose of the sampling program is to assess for potential contamination across the site, the sampling program is reliant on professional judgement to identify and sample the potentially affected areas. Further details regarding the proposed sampling plan are presented in Section 10.

F2.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

Douglas Partners Pty Ltd

Appendix G

Field Sampling Methodology

Appendix G
Field Work Methodology
207 Barry Way, Jindabyne

G1.0 Guidelines

The following key guidelines were consulted for the field work methodology:

- NEPC National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM] (NEPC, 2013).

G2.0 Soil Sampling

Soil sampling is carried out in accordance with DP standard operating procedures. The general sampling and sample management procedures comprise:

- Collect soil samples directly from the excavator bucket at the nominated sample depth;
- Collect near surface samples using the teeth of the excavator bucket to loosen up the upper 0.1 m of soil material. Samples collected by hand (whilst wearing nitrile gloves);
- Transfer samples in laboratory-prepared glass jars with Teflon lined lids by hand, capping immediately and minimising headspace within the sample jar;
- Collect replicate samples in zip-lock bags for PID screening;
- Collect ~40 g to 50 g samples in zip-lock bags for asbestos (presence / absence) analysis;
- Wear a new disposable nitrile glove for each sample point thereby minimising potential for cross-contamination;
- Collect 10% replicate samples for QC purposes. Handfuls of soil were collected from the same area of the surface sample or excavator bucket and distributed evenly between the field sample and replicate sample;
- Label sample containers with individual and unique identification details, including project number, sample location and sample depth (where applicable);
- Place samples into a cooled, insulated and sealed container for transport to the laboratory; and
- Use chain of custody documentation.

Reference was made to HEPA (2020) for requirements specific to PFAS.

G2.1 Field Testing

Field testing is carried out in accordance with DP standard operating procedures. The general sampling and sample management procedures comprise:

PID Field Test

- Calibrate the PID with isobutylene gas at 100 ppm and with fresh air prior to commencement of each successive day's field work;
- Allow the headspace in the PID zip-lock bag samples to equilibrate; and
- Screen using the PID.

G3.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

Douglas Partners Pty Ltd

Appendix H

Site Assessment Criteria

Appendix H
Site Assessment Criteria
Part Lot 101, DP1019527, Jindabyne

H1.0 Introduction

H1.1 Guidelines

The following key guidelines were consulted for deriving the site assessment criteria (SAC):

- NEPC National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [*the 'NEPM'*] (NEPC, 2013).
- CRC CARE Health screening levels for petroleum hydrocarbons in soil and groundwater (CRC CARE, 2011).

H1.2 General

The SAC applied in the current investigation are informed by the CSM which identified human and environmental receptors to potential contamination at the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The following inputs are relevant to the selection and/or derivation of the SAC:

- Land use: Proposed school
- Corresponding to land use category 'A', residential with garden / accessible soil (home grown produce <10% fruit and vegetable intake, (no poultry)), also includes children's day care centres, preschools and primary schools.
- Soil type: clay / sand

H2.0 Soils

H2.1 Health Investigation and Screening Levels

The generic health investigation levels (HIL) and health screening levels (HSL) are considered to be appropriate for the assessment of human health risk via all relevant pathways of exposure associated with contamination at the site. The adopted soil HIL and HSL for the contaminants of concern are in Table 1 and
Table 2.

Table 1: Health Investigation Levels (mg/kg)

Contaminant	HIL-A
Metals	
Arsenic	100
Cadmium	20
Chromium (VI)	100
Copper	6000
Lead	300
Mercury (inorganic)	40
Nickel	400
Zinc	7400
PAH	
B(a)P TEQ	3
Total PAH	300
Phenols	
Phenol	3000
Pentachlorophenol	100
OCP	
DDT+DDE+DDD	240
Aldrin and dieldrin	6
Chlordane	50
Endosulfan	270
Endrin	10
Heptachlor	6
HCB	10
Methoxychlor	300
OPP	
Chlorpyrifos	160
PCB	
PCB	1

Table 2: Health Screening Levels (mg/kg)

Contaminant	HSL-A&B	HSL-A&B	HSL-A&B	HSL-A&B
SAND	**0 m to <1 m**	**1 m to <2 m**	**2 m to <4 m**	**4 m+**
Benzene	0.5	0.5	0.5	0.5
Toluene	160	220	310	540
Ethylbenzene	55	NL	NL	NL
Xylenes	40	60	95	170
Naphthalene	3	NL	NL	NL
TRH F1	45	70	110	200
TRH F2	110	240	440	NL
SILT	**0 m to <1 m**	**1 m to <2 m**	**2 m to <4 m**	**4 m+**
Benzene	0.6	0.7	1	2
Toluene	390	NL	NL	NL
Ethylbenzene	NL	NL	NL	NL
Xylenes	95	210	NL	NL
Naphthalene	4	NL	NL	NL
TRH F1	40	65	100	190
TRH F2	230	NL	NL	NL
CLAY	**0 m to <1 m**	**1 m to <2 m**	**2 m to <4 m**	**4 m+**
Benzene	0.7	1	2	3
Toluene	480	NL	NL	NL
Ethylbenzene	NL	NL	NL	NL
Xylenes	110	310	NL	NL
Naphthalene	5	NL	NL	NL
TRH F1	50	90	150	290
TRH F2	280	NL	NL	NL

Notes: TRH F1 is TRH C_6-C_{10} minus BTEX

TRH F2 is TRH >C_{10}-C_{16} minus naphthalene

The soil saturation concentration (Csat) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds Csat, a soil vapour source concentration for a petroleum mixture could not exceed a level that would results in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'

The HSL for direct contact derived from CRC CARE (2011) are in Table 3.

Table 3: Health Screening Levels for Direct Contact (mg/kg)

Contaminant	DC HSL-A
Benzene	100
Toluene	14 000
Ethylbenzene	4500
Xylenes	12 000
Naphthalene	1400
TRH F1	4400
TRH F2	3300
TRH F3	4500
TRH F4	6300

Notes: TRH F1 is TRH C_6-C_{10} minus BTEX
TRH F2 is TRH >C_{10}-C_{16} minus naphthalene
IMW intrusive maintenance worker

H2.2 Asbestos in Soil

Based on the CSM and/or current site access limitations, a detailed asbestos assessment was not considered to be warranted at this stage. However, due to the history of widespread use of ACM products across Australia, ACM can be encountered unexpectedly and sporadically at a site. Therefore, the presence or absence of asbestos at a limit of reporting of 0.1 g/kg (AS:4964) has been adopted for this investigation / assessment as an initial screen.

H2.3 Ecological Investigation Levels

Ecological investigation levels (EIL) and added contaminant limits (ACL), where appropriate, have been derived in NEPC (2013) for arsenic, copper, chromium (III), nickel, lead, zinc, DDT and naphthalene. The adopted EIL, derived using the interactive (excel) calculation spreadsheet on the NEPM toolbox website are shown in Table 5, with inputs into their derivation shown in Table 4.

Table 4: Inputs to the Derivation of the Ecological Investigation Levels

Variable	Input	Rationale
Age of contaminants	“Aged” (>2 years)	Potential historical sources only
pH	6.85	Average of results
CEC	10.60 $cmol_c/kg$	Average of results
Clay content	15%	Assumed
Traffic volumes	low	Regional/rural low traffic area
State / Territory	NSW	

Table 5: Ecological Investigation Levels (mg/kg)

Contaminant	EIL-A-B-C
Metals	
Arsenic	100
Copper	210
Nickel	180
Chromium III	460
Lead	1100
Zinc	500
PAH	
Naphthalene	170
OCP	
DDT	180

Notes: EIL-AES area of ecological significance

H2.4 Ecological Screening Levels

Ecological screening levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. Coarse soil type selected due to sand or sandy clay soil types encountered. The adopted ESL are shown in Table 6.

Table 6: Ecological Screening Levels (mg/kg)

Contaminant	Soil Type	EIL-A-B-C
Benzene	Coarse	50
Toluene	Coarse	85
Ethylbenzene	Coarse	70
Xylenes	Coarse	105
TRH F1	Coarse/ Fine	180*
TRH F2	Coarse/ Fine	120*
TRH F3	Coarse	300
TRH F4	Coarse	2800
B(a)P	Coarse	0.7

Notes: ESL are of low reliability except where indicated by * which indicates that the ESL is of moderate reliability
TRH F1 is TRH C_6-C_{10} minus BTEX
TRH F2 is TRH >C_{10}-C_{16} including naphthalene

H2.5 Management Limits

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

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

Coarse soil type selected due to sand or sandy clay soil types encountered. The adopted management limits are in Table 7.

Table 7: Management Limits (mg/kg)

Contaminant	Soil Type	ML-A-B-C
TRH F1	Coarse	700
TRH F2	Coarse	1000
TRH F3	Coarse	2500
TRH F4	Coarse	10 000

Notes: TRH F1 is TRH C_6-C_{10} including BTEX
TRH F2 is TRH >C_{10}-C_{16} including naphthalene

H3.0 References

CRC CARE. (2011). *Health screening levels for petroleum hydrocarbons in soil and groundwater.* Parts 1 to 3, Technical Report No. 10: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix I

Test Pit Logs

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1003 AHD
EASTING: 644301
NORTHING: 5966954

PIT No: 1
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1003	0.15	TOPSOIL/Sandy CLAY (CL): low plasticity, pale brown, fine to coarse grained sand, with rootlets, dry to moist, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
	0.4	Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets, trace gravel up to 20mm in size, moist to dry, w<PL, very stiff, residual							
		GRANODIORITE: medium to coarse grained, pale brown, dry, very low to low strength, highly weathered		E	0.5		PID < 1		
				B	0.7				
1002	1	-from 1.2m, pockets/seams of medium to high strength, moderately to slightly weathered		E	1.0		PID < 1		1
				D	1.4				
	1.5	Pit discontinued at 1.5m -limit of investigation							
1001	2								2
1000	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1002 AHD
EASTING: 644336
NORTHING: 5966995

PIT No: 2
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1002	0.15	FILL/SAND (SP): poorly graded, fine to medium grained, grey, with rootlets, dry, loose to medium dense, FILL		E	0.1		PID < 1		
		FILL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, trace concrete with steel reinforcement block and terracotta pipe fragments, moist to dry, w~PL, stiff to very stiff		E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, blue-grey, dry, high to very high strength. slightly weathered, fractured -bucket refusal at 0.65m							
1001	1								1
	1.9	Pit discontinued at 1.9m -ripper refusal							
1000	2								2
999	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1004 AHD
EASTING: 644322
NORTHING: 5967031

PIT No: 3
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1004		TOPSOIL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, with rootlets, dry to moist, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
	0.3	TONALITE: medium to coarse grained, dark yellow-brown, dry, very low to low strength, highly weathered, fractured, with occasional clay seams and occasional low to medium strength, highly to moderately weathered seams		E	0.5		PID < 1		
					0.6				
				B					
					0.8				
1003	1			D	1.0				1
	1.7	Pit discontinued at 1.7m -limit of investigation							
1002	2								2
1001	3								3

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1002 AHD
EASTING: 644348
NORTHING: 5967025

PIT No: 4
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1002	0.0	TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets, trace silt, moist to dry, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
	0.3	Sandy CLAY (CI): medium plasticity, dark yellow-brown, fine to coarse grained sand, dry to most, w<PL, very stiff to hard, residual		D E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, yellow-grey, dry, very low to low strength, highly weathered, slightly fracture to fractured with iron staining along joints							
1001	1			E	1.0		PID < 1		1
		-from 1.2m, low strength							
				D	1.7				
1000	2	-from 2.0m, low to medium strength, highly to moderately weathered, fractured							2
		-from 2.4m, ripper used							
		-from 2.5m, medium to high strength, moderately weathered		D	2.6				
999	3	-from 3.0m, blue-grey, moderately to slightly weathered							3
	3.5	Pit discontinued at 3.5m -ripper refusal		D	3.5				

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1000 AHD
EASTING: 644372
NORTHING: 5967003

PIT No: 5
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1000		TOPSOIL FILL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets, trace silt, moist to dry, w<PL, very stiff, TOPSOIL FILL		E	0.1		PID < 1		
	0.3	FILL/Sandy CLAY (CL/CI): low to medium plasticity, dark yellow-brown, fine to coarse grained sand, with quartz rounded gravel up to 30mm in size, dry to moist, w<PL, very stiff to hard, FILL		D E	0.5		PID < 1 R2		
		-at 0.7m, terracotta pipeline							
	0.8	TONALITE: medium to coarse grained, yellow-grey, dry, very low to low strength, highly weathered, fractured, with iron staining in between joints							
999	1			E	1.0		PID < 1		1
998	2	-from 2.0m, low to medium strength, highly to moderately weathered -from 2.1m, grey		D	2.0				2
		-from 2.5m, ripper required							
997	3 3.0	Pit discontinued at 3.0m -ripper refusal		D	3.0				3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R2 is the replicate sample of sample Pit 5/0.5m

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 999 AHD
EASTING: 644383
NORTHING: 5967044

PIT No: 6
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
999		TOPSOIL FILL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, dry to moist, w<PL, very stiff, TOPSOIL FILL		E	0.1		PID < 1		
	0.3	TONALITE: medium to coarse grained, pale orange-brown, dry, very low strength, highly weathered, fractured, with iron staining		D E	0.5		PID < 1		
998	1	-from 1.0m, low strength		E	1.0		PID < 1		1
		-from 1.4m, part of the test pit has medium strength, moderately weathered tonalite present							
		-from 1.8m, ripper required							
997	2	-from 2.0m, blue-grey/brown-grey, medium strength, moderately weathered, with some high strength seams							2
	2.2	Pit discontinued at 2.2m -ripper refusal							
996	3								3

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 995 AHD
EASTING: 644436
NORTHING: 5967029

PIT No: 7
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
995		TOPSOIL FILL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets, quartz gravel up to 20mm in size, glass, porcelain and terracotta pipe fragments, trace silt, moist to dry, w<PL, very stiff, TOPSOIL FILL		E	0.1		PID < 1		
	0.25	Sandy CLAY (CI): medium plasticity, orange-brown, fine to coarse grained sand, moist to dry, w<PL, very stiff to hard, extremely weathered granodiorite		D	0.4				
				E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, orange-brown, dry to moist, very low strength, highly weathered							
994	1								1
	1.5	Pit discontinued at 1.5m -limit of investigation							
993	2								2
992	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 997 AHD
EASTING: 644419
NORTHING: 5967059

PIT No: 8
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
997		TOPSOIL FILL/Gravelly SAND (SW): well graded, fine to coarse grained, brown, gravel rounded up to 60mm in size, with cobbles up to 100mm in size, rootlets, dry to moist, medium dense to dense, TOPSOIL FILL		D E	0.1		PID < 1		
	0.3	Sandy CLAY (CI): medium plasticity, orange-brown, fine to coarse grained sand, moist to dry, w<PL, hard, extremely weathered granodiorite, with some very low strength, highly weathered seams		D E	0.5		PID < 1		
	0.7	TONALITE: medium to coarse grained, pale orange-grey, dry, very low strength, highly weathered							
996	1			E	1.0		PID < 1		1
		-from 1.4m, low strength							
995	2			D	2.2				2
994	3								3
	3.5	Pit discontinued at 3.5m -limit of investigation							

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1001 AHD
EASTING: 644362
NORTHING: 5967084

PIT No: 9
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1001	0.2	TOPSOIL/Gravelly Clayey SAND (SC): fine to coarse grained, pale brown, low plasticity clay, gravel up to 20mm in size, with rootlets, dry to moist, medium dense, TOPSOIL		E	0.1		PID < 1		
		TONALITE: medium to coarse grained, pale grey, dry, medium to high strength, moderately to slightly weathered, slightly fractured, with iron staining -from 0.25m, ripper required							
	0.6	Pit discontinued at 0.6m -ripper refusal		D	0.6				
1000	1								
999	2								
998	3								

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 997 AHD
EASTING: 644413
NORTHING: 5967083

PIT No: 10
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
997		TOPSOIL FILL/Sandy CLAY (CL): low plasticity, pale brown, fine to coarse grained sand, with rootlets, trace gravel up to 60mm in size, dry to moist, w<PL, very stiff, TOPSOIL FILL		E	0.1		PID < 1		
	0.3	Clayey SAND (SC): fine to coarse grained, pale brown, low plasticity clay, trace gravel up to 20mm in size, dry to moist, medium dense to dense, possible colluvial		D E	0.5		PID < 1		
	0.8	TONALITE: medium to coarse grained, pale yellow-brown, dry, very low to low strength, highly weathered							
996	1			E	1.0		PID < 1		1
				D	1.7				
995	2								2
				D	3.2				
994	3	-from 3.2m, ripper required							3
				D	3.5				
	3.6	-from 3.5m, grey/white, high strength, moderately to slightly weathered							
		Pit discontinued at 3.6m -ripper refusal							

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1001 AHD
EASTING: 644351
NORTHING: 5967117

PIT No: 11
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1001	0.25	TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained, dry to moist, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
		Sandy CLAY (CL/CI): low to medium plasticity, brown, fine to coarse grained, dry to moist, w<PL, very stiff to hard, extremely weathered, TONALITE		D E B	0.5		PID < 1		
	0.7	TONALITE: medium to coarse grained, orange brown, dry to moist, low strength, highly weathered, fracture, with iron staining			0.7				
1000	1			D	1.0				1
999	2	-from 2.0m, green-grey, highly to moderately weathered		D	2.0				2
		-from 2.4m, ripper required, low to medium strength							
		-from 2.7m, green, high strength, slightly weathered		D	2.7				
	2.8	Pit discontinued at 2.8m -ripper refusal							
998	3								3

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 996 AHD
EASTING: 644427
NORTHING: 5967109

PIT No: 12
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
996		FILL/SAND (SP): poorly graded, medium grained, grey-brown, with rootlets, trace low plasticity silt and clay, moist, medium dense, FILL		E	0.1		PID < 1 R4		
	0.3	Sandy CLAY (CI): medium plasticity, orange-brown/red-brown, fine to coarse grained sand, with silt, moist to dry, very stiff to hard, extremely weathered tonalite		D	0.4				
				E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, dark orange-brown, moist to dry, very low strength, highly weathered, fractured							
995	1	-from 1.0m, low to medium strength, highly to moderately weathered		D E	1.0		PID < 1		1
		-from 1.6m , ripper required, grey brown, high strength, moderately to slightly weathered							
994	2								2
	2.1	Pit discontinued at 2.1m -slow ripper progress							
993	3								3

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R4 is the replicate sample of sample Pit 12/0.1m

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 999 AHD
EASTING: 644373
NORTHING: 5967145

PIT No: 13
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
999		TOPSOIL/Clayey SAND (SC): fine to coarse grained, brown, low plasticity clay, with rootlets, moist to dry, medium dense, TOPSOIL		E	0.1		PID < 1		
	0.25	Sandy CLAY (CL): low plasticity, orange-brown, fine to coarse grained sand, dry to moist, w<PL, very stiff to hard, residual/extremely weathered tonalite		D E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, orange-brown/red-brown, dry to moist, very low strength, highly weathered, fractured		D E	1.0		PID < 1		
998	1								1
				D	1.8				
997	2								2
				D	2.2				
	2.4	Pit discontinued at 2.4m -slow progress							
996	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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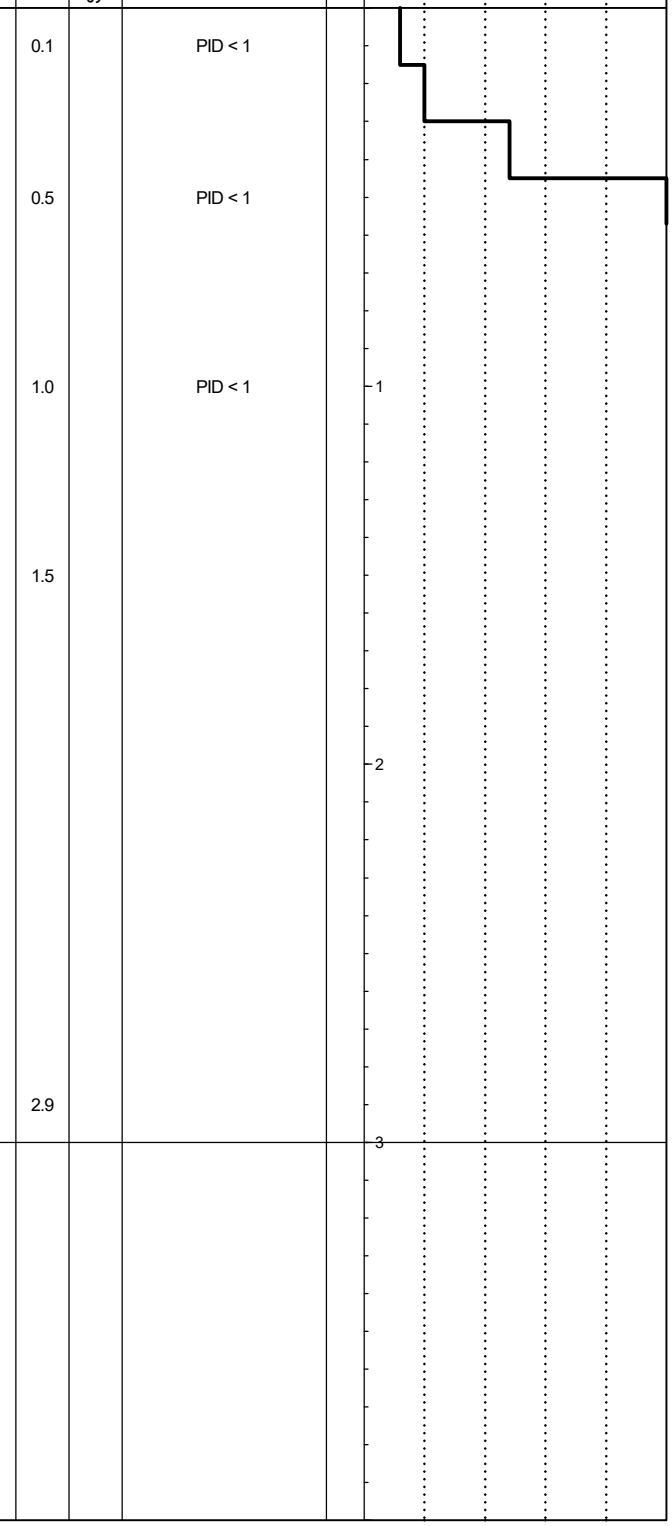
TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 997 AHD
EASTING: 644408
NORTHING: 5967141

PIT No: 14
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
997		TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained, with silt and rootlets, trace gravel up to 10mm in size, moist to dry, w<PL, stiff to very stiff, TOPSOIL		E	0.1		PID < 1		
	0.3	TONALITE: medium to coarse grained, orange brown, with rootlets, dry to moist, very low to low strength, highly weathered, fragmented to fractured							
		-from 0.5m, fractured		E	0.5		PID < 1		
996	1	-from 1.0m, ripper required, brown, medium strength, moderately weathered		E	1.0		PID < 1		1
		-from 1.5m, medium to high strength, moderately weathered		D	1.5				
995	2	-from 2.2m, low to medium strength, highly to moderately weathered							2
		-from 2.9m, blue grey, medium to high strength, moderately to slightly weathered		D	2.9				
994	3 3.0	Pit discontinued at 3.0m -slow ripper progress							3



RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 995 AHD
EASTING: 644439
NORTHING: 5967139

PIT No: 15
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
995		TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained, with rootlets, moist to dry, w<PL, stiff, TOPSOIL		E	0.1		PID < 1		
	0.3	Sandy CLAY (CI): medium plasticity, brown, mottled orange, fine to coarse grained sand, moist to dry, w<PL, very stiff to hard, extremely weathered tonalite		D E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, orange brown, dry to moist, low strength, highly weathered, fractured, trace rootlets, iron staining							
994	1	-from 1.0m, ripper required, grey brown, medium to high strength, moderately to slightly weathered		E	1.0		PID < 1		1
				D	1.5				
	1.7	Pit discontinued at 1.7m -ripper refusal							
993	2								2
992	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 999 AHD
EASTING: 644356
NORTHING: 5967187

PIT No: 16
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
999		FILL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, with rootlets, rounded to angular gravel up to 60mm in size, trace glass fragments, dry to moist, w<PL, very stiff, FILL		E	0.1		PID < 1		
				E	0.5		PID < 1		
998	1			E	1.0		PID < 1		1
	1.4	Sandy CLAY (CL): low plasticity, pale orange-brown, fine to coarse grained sand, dry to moist, w<PL, hard, possible colluvial							
	1.5	Pit discontinued at 1.5m -limit of investigation		E	1.5		PID < 1		
997	2								2
996	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 997 AHD
EASTING: 644356
NORTHING: 5967187

PIT No: 16A
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
997	0.2	TOPSOIL/Sandy CLAY (CL): low plasticity, pale brown, fine to coarse grained sand, with rootlets, dry to moist, w<PL, very stiff, TOPSOIL							
	0.4	Sandy CLAY (CL): low plasticity, pale orange-brown, fine to coarse grained sand, dry to moist, w<PL, hard, possible colluvial							
		Sandy CLAY (CI): medium plasticity, dark orange-brown/red-brown, fine to coarse grained sand, dry to moist, w<PL, hard, extremely weathered tonalite		B	0.4				
	0.6	TONALITE: medium to coarse grained, red-brown, dry to moist, very low to low strength, highly weathered, fractured			0.6				
996	1								1
	1.6	Pit discontinued at 1.6m -limit of investigation							
995	2								2
994	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 996 AHD
EASTING: 644384
NORTHING: 5967187

PIT No: 17
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
996	0.2	TOPSOIL FILL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained, with rootlets and gravel up to 10mm in size, trace polypipe, dry to moist, w<PL, hard, TOPSOIL FILL		E	0.1		PID < 1		
		TONALITE: medium to coarse grained, grey, dry, high strength, moderately weathered, iron staining		E	0.5		PID < 1		
995	1	-from 0.8m, ripper required, some very high to high strength, slightly weathered seams		D	0.8				
	1.2	Pit discontinued at 1.2m -ripper refusal							
994	2								
993	3								

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 994 AHD
EASTING: 644438
NORTHING: 5967177

PIT No: 18
PROJECT No: 103109.03
DATE: 22/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
994		TOPSOIL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, with rootlets, dry to moist, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
	0.25	Sandy CLAY (CL): low plasticity, pale brown, fine to coarse grained sand, dry to moist, w<PL, very stiff to hard, extremely weathered tonalite		D E	0.5		PID < 1		
	0.6	TONALITE: medium to coarse grained, orange-brown, very low to low strength, highly weathered, fractured		E	1.0		PID < 1		
993	1			D	1.2				1
		-from 1.5m, low strength							
		-from 1.7m, ripper required, brown-grey, mottled blue, high to very high strength, moderately to slightly weathered							
	1.9	Pit discontinued at 1.9m		D	1.9				
992	2	-ripper refusal							2
991	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 992 AHD
EASTING: 644440
NORTHING: 5967214

PIT No: 19
PROJECT No: 103109.03
DATE: 22/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
992	0.2	TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets, dry to moist, w<PL, stiff to very stiff, TOPSOIL		E	0.1		PID < 1		
	0.5	Sandy CLAY (CL): low plasticity, pale brown, fine to coarse grained sand, dry to moist, w<PL, very stiff to hard, residual		E	0.5		PID < 1		
	0.7	Sandy CLAY (CL/CI): low to medium plasticity, pale orange-brown, fine to coarse grained sand, dry to moist, w<PL, hard, extremely weathered tonalite							
991	1	TONALITE: medium to coarse grained, orange-brown, dry to moist, very low to low strength, highly weathered, fractured to slightly fractured		E	1.0		PID < 1		1
990	2			D	2.1				2
		-from 2.6m, low strength							
		-from 2.7m, ripper required		D	2.7				
989	3								3
	3.5	Pit discontinued at 3.5m -slow ripper progress							

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 995 AHD
EASTING: 644386
NORTHING: 5967218

PIT No: 20
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
995	0.2	TOPSOIL FILL/Sandy CLAY (CL): low plasticity, brown, fine to coarse grained sand, with gravel up to 50mm and rootlets, dry to moist, w<PL, stiff, TOPSOIL FILL		E	0.1		PID < 1		
		FILL/Clayey SAND (SC): fine to coarse grained, brown, low plasticity clay, with gravel up to 60mm in size, trace asphalt and glass, dry to moist, loose to medium dense, FILL		D E	0.5		PID < 1		
994	1			E	1.0		PID < 1		
	1.5	TONALITE: medium to coarse grained, green-grey, dry, medium to high strength, moderately to slightly weathered, fractured to highly fractured, with some low strength, highly weathered seams							
993	2			D	2.3			▽	
992	3	3.0 Pit discontinued at 3.0m -limit of investigation							

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: Perched groundwater at 2.2m

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 992 AHD
EASTING: 644411
NORTHING: 5967245

PIT No: 21
PROJECT No: 103109.03
DATE: 21/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
992		TOPSOIL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, trace gravel up to 20mm in size, dry to moist, w<PL, very stiff, TOPSOIL		E	0.1		PID < 1		
	0.3	Gravelly SAND (SW): well graded, fine to coarse grained, pale orange-brown, gravel up to 60mm in size, with cobbles up to 100mm in size, trace boulders up to 300mm in size, dry to moist, medium dense to dense, possible colluvial		D E	0.5		PID < 1		
	0.9	TONALITE: medium to coarse grained, grey, dry, medium to high strength, moderately to slightly weathered, highly fractured to fractured		E	1.0		PID < 1		
991	1	-from 1.0m, large high to very high corestone, cannot be ripped -from 1.2m, ripper required							1
		-from 1.5m, fractured		D	1.5				
990	2								2
	2.4	Pit discontinued at 2.4m -slow ripper progress							
989	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 998 AHD
EASTING: 644399
NORTHING: 5967006

PIT No: 22
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
998	0.25	TOPSOIL FILL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, with rootlets and quartz gravel up to 20mm in size, trace silt, moist, w~PL, very stiff, TOPSOIL FILL		E	0.1		PID < 1		
		Sandy CLAY (CI/CH): medium to high plasticity, orange-brown/red-brown, fine to coarse grained sand, moist to dry, w<PL, very stiff, residual/extremely weathered tonalite		D E	0.4 0.5		PID < 1		
				U_{50}					
997	0.8 1	TONALITE: fine to coarse grained, pale grey-green, dry to moist, very low to low strength, highly weathered			0.9				
				D	1.0				
	1.5	Pit discontinued at 1.5m -limit of investigation							
996	2								
995	3								

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1002 AHD
EASTING: 644321
NORTHING: 5966931

PIT No: 23
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1002	0.15	FILL/SAND (SP): poorly graded, fine to medium grained, grey, with rootlets, dry, medium dense, FILL		E	0.1		PID < 1		
	0.3	Sandy CLAY (CL): low plasticity, brown, with rootlets, silt and fine to coarse grained sand, dry to moist, w<PL, very stiff, remnant topsoil							
	0.4	Sandy CLAY (CL): low plasticity, grey, fine to coarse grained sand, trace gravel up to 20mm in size, dry to moist, w<PL, hard, residual/extremely weathered granodiorite		E	0.5		PID < 1		
1001	1	GRANODIORITE: medium to coarse grained, yellow-brown/grey-brown, dry, very low to low strength, highly weathered		E	1.0		PID < 1		1
	1.5	Pit discontinued at 1.5m -limit of investigation		D	1.5				
1000	2								2
999	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1005 AHD
EASTING: 644309
NORTHING: 5967005

PIT No: 24
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1005		FILL/Clayey SAND (SC): well graded, fine to coarse grained, pale brown.dark brown, low plasticity clay, with gravel up to 30mm in size, trace cobbles up to 100mm in size, asphalt, dry to moist, FILL		E	0.1		PID < 1		
				E	0.5		PID < 1 R1		
1004	1	-from 0.9m, trace boulders up to 500mm in size		D E	1.0		PID < 1		1
		-from 1.3m, boulders larger in size, could be possible surface rock							
	1.5	Pit discontinued at 1.5m -refusal on boulders		E	1.5		PID < 1		
1003	2								2
1002	3								3

Dynamic Penetrometer Test (blows per 150mm): 5 10 15 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R1 is the replicate sample of sample Pit 24/0.5m

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

SAMPLING & IN SITU TESTING LEGEND

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

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 995 AHD
EASTING: 644421
NORTHING: 5966982

PIT No: 25
PROJECT No: 103109.03
DATE: 20/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
995	0.15	TOPSOIL FILL/clayey SAND (SC): fine to coarse grained, dark brown, low plasticity clay, with glass, brick, timber and concrete fragments, rootlets, moist to dry, medium dense, TOPSOIL FILL		E	0.1		PID < 1 R3		
				E	0.2		M1 (ACM Fragment)		
	0.4	Clayey SAND (SC): fine to coarse grained sand, dark brown, low plasticity clay, with rootlets, dry to moist, w<PL, medium dense, residual							
	0.6	Sandy CLAY (CL): low plasticity, dark yellow-brown, fine to coarse grained sand, with quartz gravel up to 20mm in size, dry to moist, w<PL, hard, residual		D E	0.5		PID < 1		
994	1	TONALITE: medium to coarse grained, pale orange-grey, dry, low strength, highly weathered, fractured		E	1.0		PID < 1		1
	1.5	Pit discontinued at 1.5m -limit of investigation		D	1.5				
993	2								2
992	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R3 is the replicate sample of sample Pit 25/0.1m

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1005 AHD
EASTING: 644286
NORTHING: 5967015

PIT No: 26
PROJECT No: 103109.03
DATE: 22/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
1005	0.2	TOPSOIL FILL/Sandy CLAY (CL): low plasticity, dark brown, fine to coarse grained sand, trace gravel up to 10mm in size, dry to moist, w<PL, TOPSOIL FILL		E	0.1		PID < 1 R6		
		FILL/Clayey SAND (SC): fine to coarse grained, dark brown, low plasticity clay, with gravel up to 60mm in size, cobbles up to 200mm in size, trace boulders up to 400mm in size and terracotta pot, dry to moist, FILL		E	0.3		M4 (Fibrous material fragment)		
				E	0.5		PID < 1		
1004	0.9 1	FILL/Clayey SAND (SC): fine to coarse grained, pale brown, low plasticity clay, with quartz gravel up to 60mm in size, dry to moist, FILL		E	1.0		PID < 1		1
	1.4	TONALITE: medium to coarse grained, pale orange-brown, dry to moist, low strength, highly weathered							
	1.5	Pit discontinued at 1.5m -limit of investigation							
1003	2								2
1002	3								3

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R6 is the replicate sample of sample of sample Pit 26/0.4m.

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

SAMPLING & IN SITU TESTING LEGEND

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

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TEST PIT LOG

CLIENT: School Infrastructure NSW
PROJECT: Jindabyne Central School
LOCATION: Lot 101 DP1019527, Jindabyne

SURFACE LEVEL: 1004 AHD
EASTING: 644329
NORTHING: 5967092

PIT No: 27
PROJECT No: 103109.03
DATE: 22/4/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm) 5 10 15 20
1004		FILL/Clayey SAND (SC): fine to coarse grained, brown, low plasticity clay, with rootlets and gravel up to 60mm in size, dry to moist, w<PL, FILL		E	0.1		PID < 1		
		-from 0.3m, dark brown		E	0.5		PID < 1 R5		
1003	0.9 1	TONALITE: medium to coarse grained, pale orange-brown, dry, low strength, highly weathered, fractured		E	1.0		PID < 1		1
	1.2	Pit discontinued at 1.2m -limit of investigation							
1002	2								2
1001	3								3

RIG: Komatsu PC 138 US fitted with 600mm wide toothed bucket

LOGGED: SDG

SURVEY DATUM: MGA94 Zone 55

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Survey drawings for the whole site have not been provided to DP yet. Therefore, RLs and coordinates are approximate only and must not be relied upon. R5 is the replicate sample of sample 27/0.5m

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

SAMPLING & IN SITU TESTING LEGEND

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

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Appendix J

Laboratory Sample Receipt
Chain of Custody
Laboratory Certificate

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	103109.03	**Suburb:** Jindabyne	**To:** Envirolab
Project Name:	Jindabyne	**Order Number**	
Project Manager	Shannon Goodsell	**Sampler:** SDG/EAGL	**Attn:** Aileen Hie
Emails:	nnon.goodsell@douglaspartners.con		**Phone:** 02 9910 6200
Date Required:	Same day ☐ 24 hours ☐ 48 hours ☐ 72 hours ☐ Standard ☑		**Email:** AHie@envirolab.com.au
Prior Storage:	Fridge	Do samples contain 'potential' HBM? Yes ☐	

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil W - water)	Container Type (G - glass P - plastic)	Analytes: Comb. 8a	Comb. 6a	Asbestos ID in Material	pH	CEC	BTEX	Heavy Metals & PAH			Notes/preservation
Pit 1/0.1	1	20/04/21	S	G	X									
Pit 2/0.1	2	20/04/21	S	G	X									
Pit 2/0.5	3	20/04/21	S	G		X								
Pit 3/0.1	4	20/04/21	S	G	X									
Pit 5/0.1	5	20/04/21	S	G	X									
Pit 5/0.5	6	20/04/21	S	G		X								
Pit 6/0.1	7	21/04/21	S	G	X									
Pit 7/0.1	8	20/04/21	S	G	X									
Pit 8/0.1	9	20/04/21	S	G	X									
Pit 10/0.1	10	21/04/21	S	G										
Pit 11/0.1	11	21/04/21	S	G	X									
Pit 12/0.1	12	21/04/21	S	G	X									
Pit 13/0.1	13	21/04/21	S	G	X									
Pit 14/0.1	14	21/04/21	S	G	X									
Pit 16/0.1	15	21/04/21	S	G	X									
PQL (S) mg/kg														

ENVIROLAB GROUP Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 267874
Date Received: 29/4/21
Time Received: 1045
Received By: VV
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

ANZECC PQLs req'd for all water analytes ☐

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:

Relinquished by: SDG

Transported to laboratory by: TNT

Send Results to: shannon.goodsell@douglaspartners.com.au

Address

Phone: **Fax:**

Signed:

Received by: ELS-SYD, V.VEGA

Date & Time: 29/4/21 @ 1045

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	103109.03	**Suburb:** Jindabyne	**To:** Envirolab
Project Name:	Jindabyne	**Order Number**	
Project Manager	Shannon Goodsell	**Sampler:** SDG/EAGL	**Attn:** Aileen Hie
Emails:	nnon.goodsell@douglaspartners.con		**Phone:** 02 9910 6200
Date Required:	Same day ☐ 24 hours ☐ 48 hours ☐ 72 hours ☐ Standard ✓		**Email:** AHie@envirolab.com.au
Prior Storage:	Fridge	Do samples contain 'potential' HBM? Yes ☐	

Sample ID	Lab ID	Sampling Date	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Comb. 8a	Comb. 6a	Asbestos ID in Material	pH	CEC	BTEX	Heavy Metals & PAH			Notes/preservation
Pit 16/1.0	16	21/04/21	S	G		X								
Pit 18/0.1	17	22/04/21	S	G	X									
Pit 20/0.5	18	21/04/21	S	G	X									
Pit 20/1.0	19	21/04/21	S	G		X								
Pit 21/0.1	20	22/04/21	S	G	X									
Pit 22/0.1	21	20/04/21	S	G	X									
Pit 23/0.1	22	20/04/21	S	G	X									
Pit 24/0.1	23	20/04/21	S	G	X									
Pit 24/0.5	24	20/04/21	S	G	X									
Pit 25/0.1	25	20/04/21	S	G	X									
Pit 26/0.1	26	22/04/21	S	G	X									
Pit 26/0.5	27	22/04/21	S	G		X								
Pit 27/0.1	28	22/04/21	S	G		X								
Pit 27/0.5	29	22/04/21	S	G	X									
Pit 25/0.5	30	20/04/21	S	G		X								
PQL (S) mg/kg														

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

ANZECC PQLs req'd for all water analytes ☐

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container: **Relinquished by:** SDG **Transported to laboratory by:** TNT

Send Results to: nnon.goodsell@douglaspartners.cc **Address** **Phone:** **Fax:**

Signed: **Received by:** ELS-SYD, V. DEGA **Date & Time:** 29/4/21 @ 1045

* 267874

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	103109.03	**Suburb:** Jindabyne	**To:** Envirolab
Project Name:	Jindabyne	**Order Number**	
Project Manager	Shannon Goodsell	**Sampler:** SDG/EAGL	**Attn:** Aileen Hie
Emails:	nnon.goodsell@douglaspartners.con		**Phone:** 02 9910 6200
Date Required:	Same day ☐ 24 hours ☐ 48 hours ☐ 72 hours ☐ Standard ✓		**Email:** AHie@envirolab.com.au
Prior Storage:	Fridge	Do samples contain 'potential' HBM? Yes ☐	

Sample ID	Lab ID	Sampling Date	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Comb. 8a	Comb. 6a	Asbestos ID in Material	pH	CEC	BTEX	Heavy Metals & PAH			Notes/preservation
Pit 23/0.5	NR	20/04/21	S	G		X								
Pit 10/0.5	31	21/04/21	S	G		X								
Pit 12/0.5 32	NR	21/04/21	S	G		X								
Pit 22/0.5 33	33	20/04/21	S	G		X								
Pit 1/0.1 1	1	22/04/21	S	G				X	X					
Pit 19/0.5 34	34	22/04/21	S	G				X	X					
TS1 35	35	22/04/21	S	G						X				
TB1 36	36	22/04/21	S	G						X				
R1 37	36[7]	20/04/21	S	G							X			
R2 38	38	20/04/21	S	G							X			
R3 39	39	20/04/21	S	G	X									
R4 40	3940	21/04/21	S	G							X			
R5 41	40	22/04/21	S	G	X									
R6 42	42	22/04/21	S	G	X									
M1 43	43	20/04/21	Material	P			X							
PQL (S) mg/kg														

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

ANZECC PQLs req'd for all water analytes ☐

Metals to Analyse: 8HM unless specified here:		**Lab Report/Reference No:**
Total number of samples in container:	**Relinquished by:** SDG	**Transported to laboratory by:** TNT
Send Results to: nnon.goodsell@douglaspartners.co	**Address**	**Phone:** **Fax:**
Signed:	**Received by:** ECS-SYD, V. VEGA	**Date & Time:** 29/4/21 @ 1045

* 267874

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	103109.03	**Suburb:** Jindabyne	**To:** Envirolab
Project Name:	Jindabyne	**Order Number**	
Project Manager	Shannon Goodsell	**Sampler:** SDG/EAGL	**Attn:** Aileen Hie
Emails:	nnon.goodsell@douglaspartners.con		**Phone:** 02 9910 6200
Date Required:	Same day ☐ 24 hours ☐ 48 hours ☐ 72 hours ☐ Standard ✓		**Email:** AHie@envirolab.com.au
Prior Storage:	Fridge	Do samples contain 'potential' HBM? Yes ☐	

Sample ID	Lab ID	Sampling Date	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Comb. 8a	Comb. 6a	Asbestos ID in Material	pH	CEC	BTEX	Heavy Metals	Aggressivity	Salinity	Notes/preservation
M2 44	44	22/04/21	Material	P			X							
M3 45	45	22/04/21	Material				X							
M4 46	46	22/04/21	Material				X							
PIT 3 / 0.5	46 47	47										X		Could these possibly be reported seperatly? For Agg + Sal? Thanks!
4 / 1.0	48	48										X		
10 / 1.0	49	49										X		
19 / 0.5	~~33~~	34										X		
V12 / 0.5	~~NR~~ 32	32										X		
PIT 4 / 0.5	~~49~~ 50	50											X	
7 / 0.5	50	51											X	
11 / 0.1	11	11											X	
15 / 0.5	52	52											X	
22 / 0.5	~~NR~~ 32	35											X	
(EXTRA) PIT 1/0.5	53													
PQL (S) mg/kg														

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

ANZECC PQLs req'd for all water analytes ☐

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:

Relinquished by: SDG

Transported to laboratory by: TNT

Send Results to: nnon.goodsell@douglaspartners.co

Address

Phone: **Fax:**

Signed:

Received by: ELS-SYD, V. VEGA

Date & Time: 29/4/21 @ 1045

* 267874

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www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Canberra
Attention	Shannon Goodsell

Sample Login Details

Your reference	103109.03, Jindabyne
Envirolab Reference	267874
Date Sample Received	29/04/2021
Date Instructions Received	30/04/2021
Date Results Expected to be Reported	06/05/2021

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	49 Soil, 4 Material
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	13
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Misc Soil - Inorg	Acid Extractable metalsin soil	Asbestos ID - soils	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
Pit 1/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Pit 2/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 2/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 3/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 5/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 5/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 6/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 7/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 8/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 10/0.1													✓
Pit 11/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 12/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 13/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 14/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 16/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 16/1.0	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 18/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 20/0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 20/1.0	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 21/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 22/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 23/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 24/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 24/0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 25/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 26/0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 26/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 27/0.1	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 27/0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Pit 25/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 10/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 12/0.5	✓	✓	✓	✓	✓	✓		✓	✓				

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Misc Soil - Inorg	Acid Extractable metalsin soil	Asbestos ID - soils	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
Pit 22/0.5	✓	✓	✓	✓	✓	✓		✓	✓				
Pit 19/0.5										✓	✓		
TS1	✓												
TB1	✓												
R1			✓					✓					
R2			✓					✓					
R3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
R4			✓					✓					
R5	✓	✓	✓	✓	✓	✓	✓	✓	✓				
R6	✓	✓	✓	✓	✓	✓	✓	✓	✓				
M1												✓	
M2												✓	
M3												✓	
M4												✓	
Pit 3/0.5													✓
Pit 4/1.0													✓
Pit 10/1.0													✓
Pit 4/0.5													✓
Pit 7/0.5													✓
Pit 15/0.5													✓
Pit 1/0.5	✓	✓	✓	✓	✓	✓		✓	✓				

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 267874

Client Details

Client	Douglas Partners Canberra
Attention	Shannon Goodsell
Address	Unit 2, 73 Sheppard St,, HUME, ACT, 2620

Sample Details

Your Reference	**103109.03, Jindabyne**
Number of Samples	49 Soil, 4 Material
Date samples received	29/04/2021
Date completed instructions received	30/04/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	06/05/2021
Date of Issue	06/05/2021

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Wonnie Condos, Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Dragana Tomas, Senior Chemist
Hannah Nguyen, Senior Chemist
Ken Nguyen, Senior Customer Service
Lucy Zhu, Asbestos Supervisor
Manju Dewendrage, Chemist
Priya Samarawickrama, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	98	89	105	103	100

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	102	110	90	108	96

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	90	104	104	101	93

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	105	102	95	104	110

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	103	104	99	94	100

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	105	111	103	113	103

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		267874-32	267874-33	267874-35	267874-36	267874-39
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	TS1	TB1	R3
Date Sampled		21/04/2021	20/04/2021	22/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	[NA]	[NA]	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	[NA]	[NA]	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	[NA]	[NA]	<25
Benzene	mg/kg	<0.2	<0.2	110%	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	101%	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	108%	<1	<1
m+p-xylene	mg/kg	<2	<2	107%	<2	<2
o-Xylene	mg/kg	<1	<1	106%	<1	<1
naphthalene	mg/kg	<1	<1	[NT]	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	[NT]	<3	<3
Surrogate aaa-Trifluorotoluene	%	94	97	102	89	98

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		267874-41	267874-42	267874-53
Your Reference	UNITS	R5	R6	Pit 1/0.5
Date Sampled		22/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	100	117	107

svTRH (C10-C40) in Soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	94	95	87	91	94

svTRH (C10-C40) in Soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	89	82	93	86	95

svTRH (C10-C40) in Soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	101	97	80	83	93

svTRH (C10-C40) in Soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	80	96	92	96

svTRH (C10-C40) in Soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	96	80	91	97

svTRH (C10-C40) in Soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	94	93	85	81	95

svTRH (C10-C40) in Soil						
Our Reference		267874-32	267874-33	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R3	R5	R6
Date Sampled		21/04/2021	20/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	88	83	88	85	81

svTRH (C10-C40) in Soil		
Our Reference		267874-53
Your Reference	UNITS	Pit 1/0.5
Date Sampled		20/04/2021
Type of sample		Soil
Date extracted	-	03/05/2021
Date analysed	-	05/05/2021
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	<100
TRH >C_{34} -C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	88

PAHs in Soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	124	121	117	118	115

PAHs in Soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	117	119	119	99	120

PAHs in Soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	113	119	117	117	119

PAHs in Soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	117	113	119	116	116

PAHs in Soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	104	117	116	115	116

PAHs in Soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	116	115	118	117	117

PAHs in Soil						
Our Reference		267874-32	267874-33	267874-37	267874-38	267874-39
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R1	R2	R3
Date Sampled		21/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	06/05/2021	06/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	0.61
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	114	119	117	118	112

PAHs in Soil					
Our Reference		267874-40	267874-41	267874-42	267874-53
Your Reference	UNITS	R4	R5	R6	Pit 1/0.5
Date Sampled		21/04/2021	22/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	117	116	117	117

Organochlorine Pesticides in soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	98	97	93	94	94

Organochlorine Pesticides in soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	94	127	97

Organochlorine Pesticides in soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	92	94	95	95	95

Organochlorine Pesticides in soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	91	95	93	94

Organochlorine Pesticides in soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	1.3	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	32	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	33	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	14	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	1.6	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	94	93	94	92

Organochlorine Pesticides in soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	94	96	93	94

Organochlorine Pesticides in soil						
Our Reference		267874-32	267874-33	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R3	R5	R6
Date Sampled		21/04/2021	20/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	06/05/2021	06/05/2021	05/05/2021	05/05/2021	05/05/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	92	94	93

Organochlorine Pesticides in soil		
Our Reference		267874-53
Your Reference	UNITS	Pit 1/0.5
Date Sampled		20/04/2021
Type of sample		Soil
Date extracted	-	03/05/2021
Date analysed	-	05/05/2021
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	91

Organophosphorus Pesticides in Soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	98	97	93	94	94

Organophosphorus Pesticides in Soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	94	127	97

Organophosphorus Pesticides in Soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	92	94	95	95	95

Organophosphorus Pesticides in Soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	91	95	93	94

Organophosphorus Pesticides in Soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	94	93	94	92

Organophosphorus Pesticides in Soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	94	96	93	94

Organophosphorus Pesticides in Soil						
Our Reference		267874-32	267874-33	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R3	R5	R6
Date Sampled		21/04/2021	20/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	06/05/2021	06/05/2021	05/05/2021	05/05/2021	05/05/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	92	94	93

Organophosphorus Pesticides in Soil		
Our Reference		267874-53
Your Reference	UNITS	Pit 1/0.5
Date Sampled		20/04/2021
Type of sample		Soil
Date extracted	-	03/05/2021
Date analysed	-	05/05/2021
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Surrogate TCMX	%	91

PCBs in Soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	98	97	93	94	94

PCBs in Soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	94	127	97

PCBs in Soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	92	94	95	95	95

PCBs in Soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	91	95	93	94

PCBs in Soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	88	94	93	94	92

PCBs in Soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	94	96	93	94

PCBs in Soil						
Our Reference		267874-32	267874-33	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R3	R5	R6
Date Sampled		21/04/2021	20/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	06/05/2021	06/05/2021	05/05/2021	05/05/2021	05/05/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	95	92	94	93

PCBs in Soil		
Our Reference		267874-53
Your Reference	UNITS	Pit 1/0.5
Date Sampled		20/04/2021
Type of sample		Soil
Date extracted	-	03/05/2021
Date analysed	-	05/05/2021
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	91

Misc Soil - Inorg						
Our Reference		267874-1	267874-2	267874-4	267874-5	267874-7
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 3/0.1	Pit 5/0.1	Pit 6/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		267874-8	267874-9	267874-11	267874-12	267874-13
Your Reference	UNITS	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1	Pit 12/0.1	Pit 13/0.1
Date Sampled		20/04/2021	20/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		267874-14	267874-15	267874-17	267874-18	267874-20
Your Reference	UNITS	Pit 14/0.1	Pit 16/0.1	Pit 18/0.1	Pit 20/0.5	Pit 21/0.1
Date Sampled		21/04/2021	21/04/2021	22/04/2021	21/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		267874-21	267874-22	267874-23	267874-24	267874-25
Your Reference	UNITS	Pit 22/0.1	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		267874-26	267874-29	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 26/0.1	Pit 27/0.5	R3	R5	R6
Date Sampled		22/04/2021	22/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Acid Extractable metals in soil						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	21	12	31	26	19
Copper	mg/kg	13	12	13	13	10
Lead	mg/kg	7	9	10	11	23
Mercury	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	10	5	15	12	8
Zinc	mg/kg	37	64	97	40	46

Acid Extractable metals in soil						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	21	21	16	9	6
Copper	mg/kg	10	12	8	5	6
Lead	mg/kg	14	11	14	3	10
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	11	7	4	4
Zinc	mg/kg	35	41	270	23	21

Acid Extractable metals in soil						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	10	17	14	14
Copper	mg/kg	11	8	9	10	15
Lead	mg/kg	5	9	12	9	35
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	5	7	6	6
Zinc	mg/kg	110	29	41	35	64

Acid Extractable metals in soil						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	26	15	11	15	19
Copper	mg/kg	14	48	12	33	15
Lead	mg/kg	13	19	9	4	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	12	6	6	6	9
Zinc	mg/kg	43	55	24	41	34

Acid Extractable metals in soil						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	18	18	19	24
Copper	mg/kg	11	6	17	18	15
Lead	mg/kg	7	5	20	47	18
Mercury	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	8	8	8	11
Zinc	mg/kg	93	42	57	550	60

Acid Extractable metals in soil						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	12	14	26	20
Copper	mg/kg	14	8	9	17	11
Lead	mg/kg	7	9	8	14	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	6	6	13	10
Zinc	mg/kg	42	33	35	39	32

Acid Extractable metals in soil						
Our Reference		267874-32	267874-33	267874-37	267874-38	267874-39
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R1	R2	R3
Date Sampled		21/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	34	33	21	18	22
Copper	mg/kg	17	30	18	10	19
Lead	mg/kg	11	23	24	19	51
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	17	15	9	8	9
Zinc	mg/kg	39	50	64	48	400

Acid Extractable metals in soil					
Our Reference		267874-40	267874-41	267874-42	267874-53
Your Reference	UNITS	R4	R5	R6	Pit 1/0.5
Date Sampled		21/04/2021	22/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Date analysed	-	05/05/2021	05/05/2021	05/05/2021	05/05/2021
Arsenic	mg/kg	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	14	24	36
Copper	mg/kg	15	10	15	16
Lead	mg/kg	7	8	17	10
Mercury	mg/kg	0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	6	11	17
Zinc	mg/kg	140	34	60	48

Moisture						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	5.0	4.9	7.5	7.6	7.8

Moisture						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	6.6	6.1	5.3	1.8	6.9

Moisture						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	3.8	6.8	8.3	5.1	3.8

Moisture						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	7.4	8.5	7.8	6.2	7.3

Moisture						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	7.5	3.9	6.1	8.9	7.3

Moisture						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	5.0	5.5	4.4	8.0	4.5

Moisture						
Our Reference		267874-32	267874-33	267874-37	267874-38	267874-39
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R1	R2	R3
Date Sampled		21/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	7.0	11	6.1	6.9	8.7

Moisture					
Our Reference		267874-40	267874-41	267874-42	267874-53
Your Reference	UNITS	R4	R5	R6	Pit 1/0.5
Date Sampled		21/04/2021	22/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Moisture	%	3.5	3.8	6.7	7.5

Asbestos ID - soils						
Our Reference		267874-1	267874-2	267874-3	267874-4	267874-5
Your Reference	UNITS	Pit 1/0.1	Pit 2/0.1	Pit 2/0.5	Pit 3/0.1	Pit 5/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 25g	Approx. 15g	Approx. 15g	Approx. 10g	Approx. 20g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-6	267874-7	267874-8	267874-9	267874-11
Your Reference	UNITS	Pit 5/0.5	Pit 6/0.1	Pit 7/0.1	Pit 8/0.1	Pit 11/0.1
Date Sampled		20/04/2021	21/04/2021	20/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 20g	Approx. 10g	Approx. 25g	Approx. 20g	Approx. 15g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-12	267874-13	267874-14	267874-15	267874-16
Your Reference	UNITS	Pit 12/0.1	Pit 13/0.1	Pit 14/0.1	Pit 16/0.1	Pit 16/1.0
Date Sampled		21/04/2021	21/04/2021	21/04/2021	21/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 20g	Approx. 15g	Approx. 15g	Approx. 15g	Approx. 15g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-17	267874-18	267874-19	267874-20	267874-21
Your Reference	UNITS	Pit 18/0.1	Pit 20/0.5	Pit 20/1.0	Pit 21/0.1	Pit 22/0.1
Date Sampled		22/04/2021	21/04/2021	21/04/2021	22/04/2021	20/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 15g	Approx. 15g	Approx. 15g	Approx. 15g	Approx. 15g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-22	267874-23	267874-24	267874-25	267874-26
Your Reference	UNITS	Pit 23/0.1	Pit 24/0.1	Pit 24/0.5	Pit 25/0.1	Pit 26/0.1
Date Sampled		20/04/2021	20/04/2021	20/04/2021	20/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 25g	Approx. 15g	Approx. 20g	Approx. 15g	Approx. 10g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-27	267874-28	267874-29	267874-30	267874-31
Your Reference	UNITS	Pit 26/0.5	Pit 27/0.1	Pit 27/0.5	Pit 25/0.5	Pit 10/0.5
Date Sampled		22/04/2021	22/04/2021	22/04/2021	20/04/2021	21/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 20g	Approx. 15g	Approx. 20g	Approx. 15g	Approx. 20g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		267874-32	267874-33	267874-39	267874-41	267874-42
Your Reference	UNITS	Pit 12/0.5	Pit 22/0.5	R3	R5	R6
Date Sampled		21/04/2021	20/04/2021	20/04/2021	22/04/2021	22/04/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Sample mass tested	g	Approx. 10g	Approx. 15g	Approx. 40g	Approx. 20g	Approx. 20g
Sample Description	-	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils		
Our Reference		267874-53
Your Reference	UNITS	Pit 1/0.5
Date Sampled		20/04/2021
Type of sample		Soil
Date analysed	-	04/05/2021
Sample mass tested	g	Approx. 20g
Sample Description	-	Brown fine-grained soil
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO
Trace Analysis	-	No asbestos detected

Misc Inorg - Soil			
Our Reference		267874-1	267874-34
Your Reference	UNITS	Pit 1/0.1	Pit 19/0.5
Date Sampled		20/04/2021	22/04/2021
Type of sample		Soil	Soil
Date prepared	-	04/05/2021	04/05/2021
Date analysed	-	04/05/2021	04/05/2021
pH 1:5 soil:water	pH Units	6.6	7.1

CEC			
Our Reference	UNITS	267874-1	267874-34
Your Reference		Pit 1/0.1	Pit 19/0.5
Date Sampled		20/04/2021	22/04/2021
Type of sample		Soil	Soil
Date prepared	-	06/05/2021	06/05/2021
Date analysed	-	06/05/2021	06/05/2021
Exchangeable Ca	meq/100g	4.8	12
Exchangeable K	meq/100g	0.4	0.2
Exchangeable Mg	meq/100g	1.0	2.9
Exchangeable Na	meq/100g	<0.1	<0.1
Cation Exchange Capacity	meq/100g	6.2	15

Asbestos ID - materials					
Our Reference		267874-43	267874-44	267874-45	267874-46
Your Reference	UNITS	M1	M2	M3	M4
Date Sampled		20/04/2021	22/04/2021	20/04/2021	20/04/2021
Type of sample		Material	Material	Material	Material
Date analysed	-	04/05/2021	04/05/2021	04/05/2021	04/05/2021
Mass / Dimension of Sample	-	50x40x5mm	40x40x5mm	20x20x5mm	80x60x5mm
Sample Description	-	Beige fibre cement material	Beige fibre cement material	Beige fibre cement material	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected Crocidolite asbestos detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected
Trace Analysis	-	[NT]	[NT]	No asbestos detected	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-AES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			04/05/2021	1	04/05/2021	04/05/2021		04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	123	125
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	123	125
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	107	107
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	120	124
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	124	127
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	131	133
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	133	128
naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	113	1	98	101	3	94	97

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	04/05/2021	04/05/2021		04/05/2021	04/05/2021
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	11	<25	<25	0	123	111
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	11	<25	<25	0	123	111
Benzene	mg/kg	0.2	Org-023	[NT]	11	<0.2	<0.2	0	108	98
Toluene	mg/kg	0.5	Org-023	[NT]	11	<0.5	<0.5	0	128	114
Ethylbenzene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	123	112
m+p-xylene	mg/kg	2	Org-023	[NT]	11	<2	<2	0	128	116
o-Xylene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	127	114
naphthalene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	11	96	97	1	106	90

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	04/05/2021	04/05/2021		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	21	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	21	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	21	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	21	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	21	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	21	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	21	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-023	[NT]	21	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	21	110	95	15	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	04/05/2021	04/05/2021		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	31	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	31	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	31	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	31	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	31	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	31	103	114	10	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	95	129
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	<100	<100	0	105	99
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	<100	<100	0	87	77
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	95	129
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	<100	<100	0	105	99
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	87	77
Surrogate o-Terphenyl	%		Org-020	84	1	94	97	3	124	95

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	11	<50	<50	0	117	123
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	11	<100	<100	0	84	98
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	11	<100	<100	0	92	73
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	11	<50	<50	0	117	123
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	11	<100	<100	0	84	98
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	11	<100	<100	0	92	73
Surrogate o-Terphenyl	%		Org-020	[NT]	11	95	81	16	112	86

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	21	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	21	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	21	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	21	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	21	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	21	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	21	96	79	19	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	31	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	31	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	31	95	90	5	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	116
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	86
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	93	95
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	119	109
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	104	91
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	109	100
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	76	73
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	103	105
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	113	1	124	118	5	128	117

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	106	101
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	86	82
Fluorene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	96	91
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	109	103
Anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	95	84
Pyrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	100	100
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	80	76
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	11	<0.05	<0.05	0	97	97
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	11	120	116	3	118	118

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	21	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	21	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	21	116	117	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	22	05/05/2021	05/05/2021		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	22	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	22	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	22	104	105	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	31	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	31	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	31	117	118	1	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	87	89
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	81
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	97
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	81	77
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	90
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	97
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	99	99
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	113	86
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	72
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	97
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	93	1	98	95	3	95	98

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	85	90
HCB	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	89	89
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	99	105
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	77	70
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	91	83
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	96	101
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	99	105
Endrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	113	102
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	70	92
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	82	128
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	11	97	92	5	97	92

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	21	94	94	0	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	22	05/05/2021	05/05/2021		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	22	0.1	0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	22	1.3	1.4	7	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	22	32	33	3	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	22	33	33	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	22	14	16	13	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	22	1.6	1.8	12	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	22	0.1	0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	22	88	86	2	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	31	94	93	1	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	75	69
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	81	81
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	73	73
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	110
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	97
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	86
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	67	71
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	93	1	98	95	3	95	98

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	75	71
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	81	83
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	77	89
Malathion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	84	120
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	99	122
Parathion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	92	104
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	81	107
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	11	97	92	5	97	92

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	21	94	94	0	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	22	05/05/2021	05/05/2021		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	22	88	86	2	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	31	94	93	1	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date extracted	-			03/05/2021	1	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	130	125
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	93	1	98	95	3	95	98

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date extracted	-			[NT]	11	03/05/2021	03/05/2021		03/05/2021	03/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	125	120
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	11	97	92	5	97	92

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	21	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	21	94	94	0	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	22	05/05/2021	05/05/2021		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	22	88	86	2	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	03/05/2021	03/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	31	94	93	1	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date prepared	-			04/05/2021	1	04/05/2021	04/05/2021		04/05/2021	04/05/2021
Date analysed	-			04/05/2021	1	04/05/2021	04/05/2021		04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	107	107

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date prepared	-			[NT]	11	04/05/2021	04/05/2021		04/05/2021	04/05/2021
Date analysed	-			[NT]	11	04/05/2021	04/05/2021		04/05/2021	04/05/2021
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	11	<5	<5	0	98	108

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	21	04/05/2021	04/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	04/05/2021	04/05/2021		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	21	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	267874-2
Date prepared	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Date analysed	-			05/05/2021	1	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	97	80
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	101	80
Chromium	mg/kg	1	Metals-020	<1	1	21	22	5	110	84
Copper	mg/kg	1	Metals-020	<1	1	13	13	0	102	101
Lead	mg/kg	1	Metals-020	<1	1	7	7	0	104	86
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	113	89
Nickel	mg/kg	1	Metals-020	<1	1	10	10	0	101	81
Zinc	mg/kg	1	Metals-020	<1	1	37	38	3	102	#

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	267874-22
Date prepared	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Date analysed	-			[NT]	11	05/05/2021	05/05/2021		05/05/2021	05/05/2021
Arsenic	mg/kg	4	Metals-020	[NT]	11	<4	<4	0	95	96
Cadmium	mg/kg	0.4	Metals-020	[NT]	11	<0.4	<0.4	0	101	90
Chromium	mg/kg	1	Metals-020	[NT]	11	6	6	0	108	99
Copper	mg/kg	1	Metals-020	[NT]	11	6	6	0	103	110
Lead	mg/kg	1	Metals-020	[NT]	11	10	10	0	104	88
Mercury	mg/kg	0.1	Metals-021	[NT]	11	<0.1	<0.1	0	108	#
Nickel	mg/kg	1	Metals-020	[NT]	11	4	4	0	101	92
Zinc	mg/kg	1	Metals-020	[NT]	11	21	20	5	100	113

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
Date analysed	-			[NT]	21	05/05/2021	05/05/2021		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	21	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	21	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	21	19	19	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	21	15	16	6	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	21	14	14	0	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	21	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	21	9	9	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	21	34	35	3	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
Date analysed	-			[NT]	31	05/05/2021	05/05/2021		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	31	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	31	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	31	20	23	14	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	31	11	14	24	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	31	15	17	12	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	31	10	11	10	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	31	32	37	14	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			04/05/2021	1	04/05/2021	04/05/2021		04/05/2021	[NT]
Date analysed	-			04/05/2021	1	04/05/2021	04/05/2021		04/05/2021	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	1	6.6	6.6	0	98	[NT]

QUALITY CONTROL: CEC					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			06/05/2021	[NT]	[NT]	[NT]	[NT]	06/05/2021	[NT]
Date analysed	-			06/05/2021	[NT]	[NT]	[NT]	[NT]	06/05/2021	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos: A portion of the supplied sample was sub-sampled for asbestos analysis according to Envirolab procedures.
We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.
Note: Samples were sub-sampled from jars provided by the client.

pH ran outside of recommended holding time.

8 metals in soil - # Percent recovery is not possible to report due to the inhomogeneous nature of the elements in the samples. However an acceptable recovery was obtained for the LCS.

Appendix K

Summary of Laboratory Results (Table K1)

Table K1: Summary of Laboratory Results – Metals, TRH, BTEX, PAH, Phenol, OCP, OPP, PCB, Asbestos

			Metals								TRH				BTEX				PAH				Phenol	OCP								OPP	PCB	Asbestos	
			Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	F1 ((C6-C10)-BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F4 (>C34-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	DDT+DDE+DDD[b]	Aldrin & Dieldrin	Total Chlordane	Endrin	Total Endosulfan	Heptachlor	Hexachlorobenzene	Methoxychlor	Chlorpyriphos	Total PCB	Asbestos Identification in Soil	Asbestos Identification in aterials
		PQL	4	0.4	1	1	1	0.1	1	1	25	50	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
Sample ID	Depth	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g/kg	-
Pit 1/0.1	0.1 m	20-Apr-21	<4	<0.4	**21**	**13**	**7**	<0.1	**10**	**37**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 1/0.5	0.5 m	20-Apr-21	<4	<0.4	**36**	**16**	**10**	<0.1	**17**	**48**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 2/0.1	0.1 m	20-Apr-21	<4	<0.4	**12**	**12**	**9**	**0.1**	**5**	**64**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 2/0.5	0.5 m	20-Apr-21	<4	<0.4	**31**	**13**	**10**	<0.1	**15**	**97**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 3/0.1	0.1 m	20-Apr-21	<4	<0.4	**26**	**13**	**11**	<0.1	**12**	**40**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 5/0.1	0.1 m	20-Apr-21	<4	<0.4	**19**	**10**	**23**	<0.1	**8**	**46**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 5/0.5	0.5 m	20-Apr-21	<4	<0.4	**21**	**10**	**14**	<0.1	**9**	**35**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R2	-	20-Apr-21	<4	<0.4	**18**	**10**	**19**	<0.1	**8**	**48**	-	-	-	-	-	-	-	-	<0.1	<0.05	<0.5	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 6/0.1	0.1 m	21-Apr-21	<4	<0.4	**21**	**12**	**11**	<0.1	**11**	**41**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 7/0.1	0.1 m	20-Apr-21	<4	<0.4	**16**	**8**	**14**	<0.1	**7**	**270**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 8/0.1	0.1 m	20-Apr-21	<4	<0.4	**9**	**5**	**3**	<0.1	**4**	**23**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 10/0.5	0.5 m	21-Apr-21	<4	<0.4	**20**	**11**	**15**	<0.1	**10**	**32**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 11/0.1	0.1 m	21-Apr-21	<4	<0.4	**6**	**6**	**10**	<0.1	**4**	**21**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 12/0.1	0.1 m	21-Apr-21	<4	<0.4	**16**	**11**	**5**	<0.1	**7**	**110**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	**0.4**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R4	-	21-Apr-21	<4	<0.4	**19**	**15**	**7**	**0.1**	**5**	**140**	-	-	-	-	-	-	-	-	<0.1	<0.05	<0.5	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 12/0.5	0.5 m	21-Apr-21	<4	<0.4	**34**	**17**	**11**	<0.1	**17**	**39**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 13/0.1	0.1 m	21-Apr-21	<4	<0.4	**10**	**8**	**9**	<0.1	**5**	**29**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 14/0.1	0.1 m	21-Apr-21	<4	<0.4	**17**	**9**	**12**	<0.1	**7**	**41**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 16/0.1	0.1 m	21-Apr-21	<4	<0.4	**14**	**10**	**9**	<0.1	**6**	**35**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 16/1.0	1 m	21-Apr-21	<4	<0.4	**14**	**15**	**35**	<0.1	**6**	**64**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	70 180	240 120	- 300	- 2800	0.5 50	220 85	NL 70	60 105	NL 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 18/0.1	0.1 m	22-Apr-21	<4	<0.4	**26**	**14**	**13**	<0.1	**12**	**43**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 20/0.5	0.5 m	21-Apr-21	<4	<0.4	**15**	**48**	**19**	<0.1	**6**	**55**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 20/1.0	1 m	21-Apr-21	<4	<0.4	**11**	**12**	**9**	<0.1	**6**	**24**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	70 180	240 120	- 300	- 2800	0.5 50	220 85	NL 70	60 105	NL 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 21/0.1	0.1 m	22-Apr-21	<4	<0.4	**15**	**33**	**4**	<0.1	**6**	**41**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 22/0.1	0.1 m	20-Apr-21	<4	<0.4	**19**	**15**	**14**	<0.1	**9**	**34**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 22/0.5	0.5 m	20-Apr-21	<4	<0.4	**33**	**30**	**23**	<0.1	**15**	**50**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 23/0.1	0.1 m	20-Apr-21	<4	<0.4	**13**	**11**	**7**	**0.2**	**4**	**93**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	**65**	<0.1	**15.7**	**0.1**	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 24/0.1	0.1 m	20-Apr-21	<4	<0.4	**18**	**6**	**5**	<0.1	**8**	**42**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 24/0.5	0.5 m	20-Apr-21	<4	<0.4	**18**	**17**	**20**	<0.1	**8**	**57**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R1	-	20-Apr-21	<4	<0.4	**21**	**18**	**24**	<0.1	**9**	**64**	-	-	-	-	-	-	-	-	<0.1	<0.05	<0.5	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 25/0.1	0.1 m	20-Apr-21	<4	<0.4	**19**	**18**	**47**	<0.1	**8**	**550**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R3	-	20-Apr-21	<4	<0.4	**22**	**19**	**51**	<0.1	**9**	**400**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	**0.06**	<0.5	**0.61**	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 25/0.5	0.5 m	20-Apr-21	<4	<0.4	**26**	**17**	**14**	<0.1	**13**	**39**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 26/0.1	0.1 m	22-Apr-21	<4	<0.4	**24**	**15**	**18**	<0.1	**11**	**60**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R6	-	22-Apr-21	<4	<0.4	**24**	**15**	**17**	<0.1	**11**	**60**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 26/0.5	0.5 m	22-Apr-21	<4	<0.4	**13**	**14**	**7**	<0.1	**6**	**42**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 27/0.1	0.1 m	22-Apr-21	<4	<0.4	**12**	**8**	**9**	<0.1	**6**	**33**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
Pit 27/0.5	0.5 m	22-Apr-21	<4	<0.4	**14**	**9**	**8**	<0.1	**6**	**35**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
R5	-	22-Apr-21	<4	<0.4	**14**	**10**	**8**	<0.1	**6**	**34**	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD	-
			100 100	20 -	100 460	6000 210	300 1100	40 -	400 180	7400 500	45 180	110 120	- 300	- 2800	0.5 50	160 85	55 70	40 105	3 170	- 0.7	3 -	300 -	100 -	240 180	6 -	50 -	10 -	270 -	6 -	10 -	300 -	160 -	1 -		
M1	-	20-Apr-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**Chrysotile and Amosite detected**
M2	-	22-Apr-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**Chrysotile, Amosite and Crocidolite detected**
M3	-	20-Apr-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NAD
M4	-	20-Apr-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NAD

Lab result	
HIL/HSL value	EIL/ESL value

🟨 HIL/HSL exceedance 🟩 EIL/ESL exceedance 🟧 HIL/HSL and EIL/ESL exceedance ⬜ ML exceedance 🟥 ML and HIL/HSL or EIL/ESL exceedance

🟪 Indicates that asbestos has been detected by the lab, refer to the lab report **Blue** = DC exceedance ☐ HSL 0-<1 Exceedance

Bold = Lab detections - = Not tested or No HIL/HSL/EIL/ESL (as applicable) or Not applicable NL = Non limiting AD = Asbestos detected NAD = No Asbestos detected

HIL = Health investigation level HSL = Health screening level (excluding DC) EIL = Ecological investigation level ESL = Ecological screening level ML = Management Limit DC = Direct Contact HSL

Notes:

a QA/QC replicate of sample listed directly below the primary sample

b Criteria applies to DDT only

Site Assessment Criteria (SAC):

Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:

SAC based on generic land use thresholds for Residential A with garden/accessible soil

HIL A Residential / Low - High Density (NEPC, 2013)

HSL A/B Residential / Low - High Density (vapour intrusion) (NEPC, 2013)

DC HSL / Direct contact HSL A Residential (Low density) (direct contact) (CRC CARE, 2011)

EIL/ESL U Urban Residential and Public Open Space (NEPC, 2013)

ML R/P/P Residential, Parkland and Public Open Space (NEPC, 2013)

Appendix L

Data Quality Assurance and Quality Control

Appendix L
Data Quality Assurance and Quality Control
Part Lot 101, DP1019527, Jindabyne

L1.0 Field and Laboratory Data Quality Assurance and Quality Control

The field and laboratory data quality assurance and quality control (QA/QC) procedures and results are summarised in the following Table 1. Reference should be made to the field work methodology and the laboratory results / certificates of analysis for further details. The relative percentage difference (RPD) results, along with the other filed QC samples are included at end of this appendix (Tables QA1 to QA3).

DP considered the need for inter-laboratory duplicate samples to be analysed, however at the time of preparing the proposal fee, DP did not anticipate that the site would be audited or that the investigation would be conducted through a regulatory authority. Therefore, DP considered it appropriate to only submit intra-laboratory duplicates for analysis at the time for this PSI-L.

The walkover and the desktop information indicated that significant contamination within the site was unlikely, however, trip blanks and trip spikes were used and analysed as a precautionary measure. Chemical analysis of primary samples indicated that there was a low risk of contamination within the site and therefore, the need for future trip blanks and trip spikes would be considered unnecessary.

Table 1: Field and Laboratory Quality Control

Item	Evaluation / Acceptance Criteria	Compliance
Analytical laboratories used	NATA accreditation	C
Holding times	Various based on type of analysis	C
Intra-laboratory replicates	18% of primary samples (6 replicates for 33 primary); <30% RPD	C
Trip Blanks	1 per sampling event; <PQL (refer to Table QA2)	C
Trip Spikes	1 per sampling event; 60-140% recovery (refer to Table QA3)	C
Laboratory / Reagent Blanks	1 per batch; <PQL	C
Matrix Spikes	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Surrogate Spikes	All organics analysis; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Control Samples	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C

Standard Operating Procedures (SOP)	Adopting SOP for all aspects of the sampling field work	C

Notes: C = compliance; PC = partial compliance; NC = non-compliance

The RPD results were all within the acceptable range, with the exception of those indicated in Table QA1 (provided at the end of the appendix). The exceedances are not, however, considered to be of concern given that:

- The typically low actual differences in the concentrations of the replicate pairs where some RPD exceedances occurred, particularly for in instances where a non detection has been reported in the replicate pair;
- The number of replicate pairs being collected from fill soils which by its nature is heterogeneous;
- Replicates, rather than homogenised duplicates, were used to minimise risk of volatile loss, hence greater variability can be expected;
- Most of the recorded concentrations being relatively close to the PQL;
- The majority of RPDs within a replicate pair being within the acceptable limits; and
- All other QA/QC parameters met the DQIs.

In summary, the QC data is determined to be of sufficient quality to be considered acceptable for the assessment.

L2.0 Data Quality Indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQIs) as outlined in NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [the 'NEPM']* (NEPC, 2013):

- Completeness: a measure of the amount of usable data from a data collection activity;
- Comparability: the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness: the confidence (qualitative) of data representativeness of media present on-site;
- Precision: a measure of variability or reproducibility of data; and
- Accuracy: a measure of closeness of the data to the 'true' value.

Table 2: Data Quality Indicators

Data Quality Indicator	Method(s) of Achievement
Completeness	Systematic and selected target locations sampled.
	Preparation of test pit logs, sample location plan and chain of custody records.

Data Quality Indicator	Method(s) of Achievement
	Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody.
	Samples analysed for contaminants of potential concern (COPC) identified in the Conceptual Site Model (CSM).
	Completion of chain of custody (COC) documentation.
	NATA accredited laboratory results certificates provided by the laboratory.
	Satisfactory frequency and results for field and laboratory quality control (QC) samples as discussed in Section 1.
Comparability	Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project.
	Experienced sampler(s) used.
	Use of NATA registered laboratories, with test methods the same or similar between laboratories.
	Satisfactory results for field and laboratory QC samples.
Representativeness	Target media sampled.
	Sample numbers recovered and analysed are considered to be representative of the target media and complying with DQOs.
	Samples were extracted and analysed within holding times.
	Samples were analysed in accordance with the COC.
Precision	Field staff followed standard operating procedures.
	Acceptable RPD between original samples and replicates.
	Satisfactory results for all other field and laboratory QC samples.
Accuracy	Field staff followed standard operating procedures.
	Satisfactory results for all field and laboratory QC samples.

Based on the above, it is considered that the DQIs have been generally complied with.

L3.0 Conclusion

Based on the results of the field QA and field and laboratory QC, and evaluation against the DQIs it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

L4.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

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Table QA1: Relative Percentage Difference Results – Intra-laboratory Replicates

		Metals												BTEX				PAH														OPP		
		Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	F1 ((C6-C10)-BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F4 (>C34-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	DDT+DDE+DDD [c]	Aldrin & Dieldrin	Total Chlordane	Endrin	Total Endosulfan	Heptachlor	Hexachlorobenzene	Methoxychlor	Chlorpyriphos	Total PCB	Asbestos Idnetification in Soil
Sample ID	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
R1	20-Apr-21	<4	<0.4	21	18	24	<0.1	9	64	NT	NT	NT	NT	NT	NT	NT	NT	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pit 24/0.5	20-Apr-21	<4	<0.4	18	17	20	<0.1	8	57	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
	Difference	0	0	3	1	4	0	1	7	-	-	-	-	-	-	-	-	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
	RPD	0%	0%	15%	6%	18%	0%	12%	12%	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-
R2	20-Apr-21	<4	<0.4	18	10	19	<0.1	8	48	NT	NT	NT	NT	NT	NT	NT	NT	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pit 5/0.5	20-Apr-21	<4	<0.4	21	10	14	<0.1	9	35	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
	Difference	0	0	3	0	5	0	1	13	-	-	-	-	-	-	-	-	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
	RPD	0%	0%	15%	0%	**30%**	0%	12%	**31%**	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-
R3	20-Apr-21	<4	<0.4	22	19	51	<0.1	9	400	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	0.06	<0.5	0.61	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
Pit 25/0.1	20-Apr-21	<4	<0.4	19	18	47	<0.1	8	550	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
	Difference	0	0	3	1	4	0	1	150	0	0	0	0	0	0	0	0	0	0.01	0	0.56	0	0	0	0	0	0	0	0	0	0	0	0
	RPD	0%	0%	15%	5%	8%	0%	12%	**32%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	0%	**170%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R4	21-Apr-21	<4	<0.4	19	15	7	0.1	5	140	NT	NT	NT	NT	NT	NT	NT	NT	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Pit 12/0.1	21-Apr-21	<4	<0.4	16	11	5	<0.1	7	110	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
	Difference	0	0	3	4	2	0	2	30	-	-	-	-	-	-	-	-	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
	RPD	0%	0%	17%	**31%**	**33%**	0%	**33%**	24%	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-
R5	22-Apr-21	<4	<0.4	14	10	8	<0.1	6	34	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
Pit 27/0.5	22-Apr-21	<4	<0.4	14	9	8	<0.1	6	35	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
	Difference	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RPD	0%	0%	0%	11%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R6	22-Apr-21	<4	<0.4	24	15	17	<0.1	11	60	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD
Pit 26/0.1	22-Apr-21	<4	<0.4	24	15	18	<0.1	11	60	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NAD.
	Difference	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RPD	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

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Table QA2: Trip Blank Results - Soils (mg/kg)

Sample ID	Benzene	Benzene	Toluene	Toluene	Ethylbenzene	Ethylbenzene	o-Xylene	o-Xylene	m+p-Xylene	m+p-Xylene
TB1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table QA3: Trip Spike Results – Soils (% Recovery)

Sample ID	Benzene	Benzene	Toluene	Toluene	Ethylbenzene	Ethylbenzene	o-Xylene	o-Xylene	m+p-Xylene	m+p-Xylene
TS1	110	110	101	101	108	108	106	106	107	107