Allam MHE Developments No.2 Pty Ltd

Stage 1 Site Contamination Assessment

Proposed Manufactured Home Estate – Stage 2

82 Chapmans Road, Tuncurry

Report No. RGS03357.1-AB

4 September 2023

REGIONAL GEOTECHNICAL SOLUTIONS

REGIONAL GEOTECHNICAL SOLUTIONS

Manning-Great Lakes
Port Macquarie
Coffs Harbour

RGS03357.1-AB

4 September 2023

Allam MHE Developments No.2 Pty Ltd
PO Box 7385
BAULKHAM HILLS BC NSW 2153

Attention: Mark Cerone

Dear Mark

RE: Proposed Manufactured Home Estate – Stage 2 – 82 Chapmans Road, Tuncurry

Stage 1 Site Contamination Assessment

As requested, Regional Geotechnical Solutions Pty Ltd (RGS) has undertaken a Stage 1 site contamination assessment for the proposed Manufactured Home Estate (MHE) Stage 2 at 82 Chapmans Road, Tuncurry, NSW.

Based on the results obtained in this investigation, it is considered that the site can be made suitable for the proposed residential land use with regard to the presence of soil contamination, provided the recommendations and advice of this report are adopted, and site preparation works are conducted in accordance with appropriate site management protocols and legislative requirements.

The work presented herein was reviewed by Dr David Tully CEnvP SC. A copy of Dr Tully's letter pertaining to the review is appended to the report.

If you have any questions regarding this project, or require any additional consultations, please contact the undersigned.

For and on behalf of

Regional Geotechnical Solutions Pty Ltd

Prepared by

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1 INTRODUCTION

1.1 General

Regional Geotechnical Solutions Pty Ltd (RGS) has undertaken a Stage 1 site contamination assessment for the proposed MHE Stage 2 located at 82 Chapmans Road, Tuncurry, NSW. The site location is shown on Figure 1 and the proposed site layout is shown on Figure 2.

The site comprises Lot 11 DP615229 and occupies approximately 16.3 hectares.

The Stage 1 site contamination assessment is required to assess past and present potentially contaminating activities and contamination types in order to assist with the progression of the development application (DA) for the proposed development.

The work was commissioned by Mark Cerone of Allam MHE Developments No.2 Pty Ltd and was undertaken in accordance with proposed RGS03357.1-AA, dated 31 May 2023.

1.2 Objectives

The objectives of the Stage 1 site contamination assessment were to provide a preliminary assessment of the potential for soil contamination to be present on the site.

1.3 Scope of Works

In accordance with the relevant sections of the *National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013*), the assessment involved the following process:

- Site walkover to assess visible surface conditions and identify evidence of contamination, or past activities that may cause contamination;
- Land titles search to check for evidence of past ownership that may be indicative of potentially contaminating activities;
- Review of recent and historical aerial photography dating back as far as 70 years;
- A search of NSW EPA records for contaminated land notifications on the site;
- A search of government records of groundwater bores in the area;
- Using the above information, characterise the site into Areas of Environmental Concern, in which the potential for contamination has been identified, and nominate Chemicals of Concern that might be associated with those activities;
- Undertake targeted sampling and analysis at the selected Areas of Concern to allow some preliminary analysis of the presence of contamination;
- Analyse samples for a suite of potential contaminants associated with the past activities; and
- Evaluate the results against industry accepted criteria for future residential land use.

1.4 Site Identification

General site information is provided below in Table 1. The site location is shown in Figure 1.

Table 1: Summary of Site Details

Site location:	82 Chapmans Road, Tuncurry
Approximate site area:	16.3 hectares
Title Identification Details:	Lot 11 DP615229
Current Ownership:	Michelle Woodford
Current Landuse:	Predominantly vacant land. A small shed is present in the north west corner.
Current Zoning	C2 – Environmental Conservation R2 – Low Density Residential
Proposed Landuse:	Manufactured Home Estate (MHE)
Adjoining Site Uses:	• Vacant land forming proposed MHE Stage 1 to the north; • Former nursery and landscape supplies yard to the north-east; • Undeveloped land to the east, south and south-west; • Chapmans Road and undeveloped land to the west; and • The Wallamba River is located approximately 380m to the west of the site.
Government Area:	Midcoast Council

2 Site Description

2.1 Topography and Drainage

The site is rectangular in shape and is bound vacant land forming proposed MHE Stage 1 to the north, a former nursery and landscape supplies yard to the north-east, undeveloped land to the east, south and south-west and by Chapmans Road and undeveloped land to the west. The Wallamba River is located approximately 380m to the west of the site.

The central and eastern parts of the site are situated on a low-lying Aeolian sandplain with the natural ground level being typically flat.

The western part of the site is situated on low-lying swampy terrain and is also generally flat.

Site surface elevations vary from about RL3m to RL4m.

Drainage of the site will be primarily via infiltration into the upper sandy soils.

The site had recently been slashed prior to the field investigations. Vegetation predominantly comprised grass and weeds with remnant stands of trees including Casuarina and Eucalypts up to 15m in height. The south-west corner comprised remnant uncleared bushland.

2.2 Geology

Based on the topographic conditions, the site has been divided into three terrain zones. Reference to the MinView website indicates that the underlying geology varies with each terrain as outlined below:

- Terrain Zone 1: The eastern part of the site is underlain by Holocene beach ridge and associated strandplain deposits comprising marine sand, shell and gravel;
- Terrain Zone 2: The central part, north-west corner and south-west corner of the site are underlain by Holocene tidal-delta flat deposits comprising marine sand, silt, clay, shell and gravel; and
- Terrain Zone 3: The western and south-western parts of the site are underlain by Holocene floodplain deposits comprising silt, fluvial sand and clay.

The geology of the site is presented in Plate 1 below:

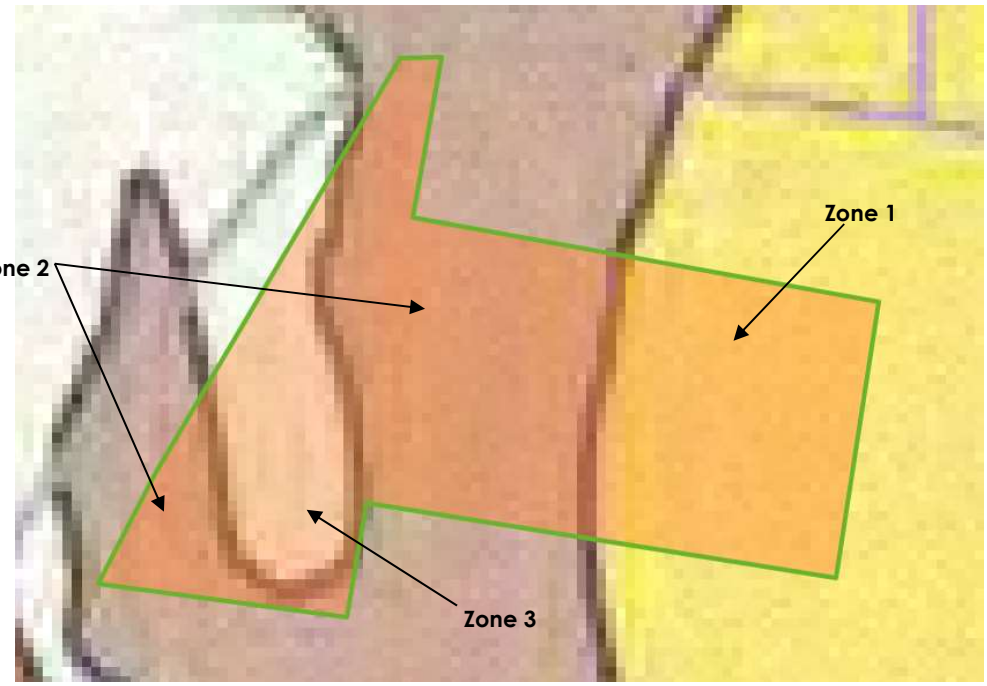


Plate 1: *Reference to the MinView website indicates that Terrain Zone 1 is underlain by Holocene beach ridge and associated strandplain deposits, Terrain Zone 2 is underlain by Holocene tidal-delta flat deposits and Terrain Zone 3 is underlain by Holocene floodplain deposits.*

2.3 Hydrogeology

A groundwater bore search on the NSW Water Information website, http://waterinfo.nsw.gov.au/gw/ indicates that there is a licenced groundwater bore (with available work summary) located approximately 400 m to the east of the site as shown below.

Plate 2: *Approximate site boundary outlined in red. Nearest off-site licensed groundwater bore is located approximately 400m to the east of the site.*

Groundwater bore GW200229 was drilled to a depth of 9m on 1 June 2002, is licenced for recreational purposes with a standing water level of 2.7m. The driller's log indicates that the soil profile comprised sand from 0m to 9m.

Groundwater is anticipated to flow in a westerly direction towards the Wallamba River.

2.4 Acid Sulfate Soil

Test pitting for the Acid Sulfate Soil (ASS) assessment undertaken on the site by RGS encountered groundwater between depths of 1.0m and 1.5m below ground surface during the limited time they remained open at the time of the field investigations. The ASS investigation report had not been completed at the time of writing of this report.

2.5 Site History

2.5.1 Historical Aerial Photography

Aerial photographs and satellite imagery of the site were obtained from NSW Spatial Services and Google Earth and reviewed to assist in identifying past land uses that may contribute to site contamination. The results of the review are summarised in Table 2.

Table 2 - Aerial Photograph and Satellite Imagery Summary

Year	Site	Surrounding Land
1952	The site appears to have been partially cleared with some vegetation present in the east and south-east areas. No structures are visible.	Chapmans Road is visible to the north of the site. Surrounding land comprises predominantly bushland and semi-cleared land. Some residential properties appear to be present to the east of the site.
1971	Remaining vegetation appears to have been cleared.	Further clearing to the east and south of the site. Residential development is visible further to the east.
1980	The central and eastern parts of the site are re-vegetated.	The existing Tuncurry Lake Resort to the south-west of the site is visible. Further residential development to east as described above.
1997	The existing shed has been constructed in the north-west corner and the existing farm dams in the central-west and north-east corner of the site are visible. The central and eastern parts have been cleared of vegetation.	Some structures are visible on land immediately to the north at the proposed Stage 1 MHE. Tuncurry racetrack has been constructed to the north of the site. Residential subdivisions have been constructed to the north-east, east and south-east.
2009 (Google Earth)	No significant changes.	Filling appears to have occurred immediately to the north at the proposed Stage 1 MHE. Further residential development as outlined above.
2016 (Google Earth)	No significant changes.	As above.
2022 (Google Earth)	Clearing of vegetation likely to be slashing appears to have occurred. No other change significant changes.	Filling appears appear to have ceased to the north at the proposed Stage 1 MHE. Vegetation has been cleared from the western end of the Stage 1 MHE site. Land to the east and south of the site has been cleared.

2.5.2 Site Observations

A site walkover was undertaken on 13 July 2023. Observations made during the site visit are summarised below:

- There was an existing shed located in the north-west corner near a site entrance gate. The shed was of masonry block construction on a concrete slab floor with a corrugated metal roof and adjoining water tank;
- The shed appeared to have been constructed on a fill mound which graded to the south to natural ground level at about 2° to 3°;
- Timber fencing, tyres and a mattress were present on the southern side of the shed;
- Two drums of canola oil were outside the shed on its eastern side;
- It is not known what was stored inside the shed, however, it has been assumed that there may be lawn mowing, gardening and general maintenance equipment present within;
- An old truck body, timber fence post and some barbed wire were present just to the south of the shed along the eastern lot boundary. No evidence of hydrocarbon contamination was visible in the vicinity of the truck body;
- Two small farm dams were present in the central-west and north-east corner of the site respectively;
- With the exception of the fill mound beneath the shed described above, no other evidence of in-situ or stockpiled fill was observed;
- No suspected Asbestos Containing Materials (ACM) were observed; and
- No evidence of gross hydrocarbon contamination such as odours or staining were observed.

A selection of images of the site is presented below.

Looking north-east showing the existing shed in the north-west corner of the site. The shed is of masonry block construction on a concrete slab with a corrugated metal roof.

Looking north-west at the existing shed. Timber fencing, tyres and a mattress were stored against the southern side of the shed. The concrete slab below the shed is visible in the foreground.

 *Looking west showing the eastern side of the shed near a site entrance from Chapmans Road. Two small drums of canola oil are shown to the right of the garage.*	 *Looking south showing an old truck body, a timber fence post and barbed wire located to the south of the shed along the eastern lot boundary.*
 *Looking east showing a small farm dam located in the central-west of the site to the south of the shed.*	 *Looking east from the western part of the site showing the typical ground conditions at the time of the field investigations. The site had recently been slashed and was generally open with small stands of trees remaining.*

2.5.3 NSW EPA Records

A check with the NSW Office of Environment and Heritage website (www.environment.nsw.gov.au) revealed that no notices have been issued on the site under the Contaminated Land Management Act (1997).

2.5.4 Land Title Search

A list of past registered proprietors and lessors of the site was obtained from the Land Titles Office. A summary of the title details is included in Appendix A.

The title history search revealed the following:

- 8 February 1916 to 14 February 1916: Bank of New South Wales, grantee;
- 14 February 1916 to March 1919: John Charles Clerke, farmer;
- March 1919 to November 1922: Otto Ernest Brallowons, farmer
- November 1922 to September 1962: John David Witt, butcher;
- September 1962 to October 1973: Robert James Witt, butcher & Ronald Eric Witt, butcher;
- October 1973 to May 1981: Pablos Pty Limited;
- May 1981 to October 1983: Civil Finance Pty Limited & Pablos Pty Limited;
- October 1983 to December 1994: Robert George John White;
- December 1994 to June 2023 : Elaine Dorothy White; and
- June 2023 to date: Michelle Woodford.

2.5.5 Site History Summary

Based on available data the chronological development of the site is summarised below:

- Land title information indicates that the site has been owned by various individuals and companies with farmers being listed as owners between 1916 and 1922;
- Historically, the site is likely to have been used for low intensity farming and grazing activities and/or unused land;
- The existing shed located in the north-west corner of the site appears to have been constructed sometime between 1980 and 1997;
- The existing farm dams in the central-west and north-east corner of the site appear to have been constructed between 1980 and 1997;
- With the exception of the above, the site layout appears to have changed little over time; and
- The majority of the site comprising open paddocks has remained largely unchanged over the last 70 years with the exception of some vegetation clearing and re-growth.

3 FIELD and LABORATORY INVESTIGATIONS

3.1 Sampling Plan

Using the methodology set out in the NSW EPA (2022) Sampling Design Guidelines, a minimum of 195 sampling locations to characterise a site of 16.3 hectares would be needed where a systematic sampling pattern is adopted to detect a hotspot of 33.5m diameter with a 95% level of confidence. Due to the preliminary nature of the assessment and on the basis of the site history, at this stage targeted sampling was considered appropriate and six sampling locations were selected using a judgemental approach based on the identification of Areas of Environmental Concern. Six soil samples (SS1 to SS6) were collected from targeted locations within the site.

3.2 Field Work

Field work for the assessment was undertaken on 13 July 2023 and included:

- Site walkover to assess visible surface conditions and identify evidence of contamination, or past activities that may cause contamination (if any); and
- Collection of six soil samples by an Environmental Engineer.

The locations of the sampling points are shown on Figure 3. They were obtained on site and located by measurement relative to existing site features.

Soil samples were taken from fill and natural soil using disposable gloves and hand tools which were decontaminated between sampling points using Decon90 detergent and deionised water. The samples were collected in acid-rinsed 250mL glass jars and placed in an ice-chilled cooler box.

3.3 Laboratory Analysis

Samples were transported under chain-of-custody conditions to ALS Laboratory Group, a NATA accredited specialist chemical testing laboratory, to be analysed for the following suite of common potential contaminants;

- Polycyclic Aromatic Hydrocarbons (PAH);
- Total Recoverable Hydrocarbons (TRH);
- Benzene, Toluene, Ethyl-benzene, Xylenes (BTEX);
- Organochlorine and Organophosphorus Pesticides (OC/OPs);
- Heavy metals (arsenic, cadmium, chromium, cobalt, copper, lead, mercury, and zinc);
- Polychlorinated Biphenyls (PCB); and
- Presence of asbestos.

The results are presented in Appendix B.

3.4 Data Quality Objectives

The Data Quality Objectives (DQOs) are presented in Table 3.

Table 3 – Data Quality Objectives

DQO	Details of Process
State the Problem	A Stage 1 (Preliminary) SCA is required to assess the suitability of the site for future residential land use from a contamination perspective.
Identify the Decision	The principal study questions that are: • What is the nature and extent of soil contamination on the subject land (if any)?; and • Is the land likely to be suitable for the proposed MHE from a contamination viewpoint?
Identify Inputs to the Decision	The primary inputs are: • Site history study; • Site walkover assessment; • Chemical analysis of selected targeted soil samples; and • Results summary.
Define the Boundary of the Assessment	• The spatial boundaries are limited to the property boundaries of the subject site as shown on Figure 1; • The investigation and screening levels for a Residential A land use scenario.
Develop a Decision Rule	The decision rules for the investigation are: • If concentrations of contaminants in soil exceed the adopted investigation and screening levels for a Residential A land use scenario, then further assessment may be required; Decision criteria for QA/QC measures are defined in Section 5. A decision on the acceptance of analytical data will be made on the basis of the data quality indicators (DQIs) in the context of precision, accuracy, representativeness, completeness and comparability (PARCC) parameters as follows: • **Precision –** NATA registered laboratories were used following NATA accredited systems and industry standard test methods. An appropriate number of intra-laboratory samples were collected and analysed (following ASC NEPM guidance), the results of which are considered to be satisfactory; • **Accuracy –** The laboratory limit or reporting (LOR) was appropriate for the screening criteria utilised. NATA registered laboratories were used following industry standard test methods including appropriate method blanks, laboratory control

DQO	Details of Process
	samples, laboratory spikes and duplicates the results of which are considered to be satisfactory. • **Representativeness –** The samples were received by the laboratories in good condition. The data obtained is considered to be representative of the soils present on site; • **Completeness –** Experienced field staff were utilised to undertake the sampling and keep appropriate documentation. Samples were in proper custody between the field and reaching the laboratory. The laboratories performed the tests requested. The data obtained from the field investigations is considered to be relevant and usable; and • **Comparability –** Sample holding times were met and samples were properly and adequately preserved. Field sampling and handling procedures were followed. The data collected is considered to be comparable.
Specify Acceptable Limits on Decision Errors	• Acceptable limits for QA/QC measures are defined in Section 5; • Acceptable investigation and screening levels are those for a Residential A land use scenario; and • Specific limits are in accordance with the appropriate NSW EPA guidelines including indicators of data quality and standard procedures for field sampling and handling.
Optimise the Design for Obtaining Data	Based on the above steps of the DQO process. The design for obtaining the required data (i.e proposed field and laboratory investigations) is presented in Section 3.1.

4 GUIDELINES and ASSESSMENT CRITERIA

Assessment as outlined in NSW EPA *Guidelines for Consultants Reporting on Contaminated Land (2020)*.

To evaluate results, and for guidance on assessment requirements, the assessment will adopt the guidelines provided in the *National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM 2013)*. The ASC NEPM document provides a range of guidelines for assessment of contaminants for various land use scenarios. It is understood that the future land use for the site is residential. As such, comparison with the ASC NEPM guideline Health Investigation Levels (HIL) for Residential A land use is considered appropriate for the site. In accordance with the NEPM guideline the following criteria will be adopted for this assessment:

- Health Investigation Levels (HILs) for residential 'A' land use (HIL-A) will be used to assess the potential human health impact of heavy metals and polycyclic aromatic hydrocarbons (PAHs);
- Health Screening Levels (HSLs) for coarse textured (sand) or fine textured (silt and clay) soils on a residential site will be adopted as appropriate for the soils encountered to assess the

potential human health impact of petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylene (BTEX) compounds;

- Ecological Investigation Levels (EILs) for residential land use will be used for evaluation of the potential ecological / environmental impact of heavy metals and naphthalene. Due to the preliminary nature of this investigation soil specific EILs for chromium, copper, nickel and zinc were not determined;
- Ecological Screening Levels (ESLs) for coarse textured (sand) soils or fine textured (silt and clay) soils on a residential land use site will be adopted as appropriate for the soils encountered, to assess the potential ecological / environmental impact of petroleum hydrocarbons, BTEX compounds and benzo(a)pyrene.

In accordance with NEPM 2013, exceedance of the respective criteria does not necessarily deem that remediation or clean-up is required but is a trigger for further assessment of the extent of contamination and associated risks.

5 QUALITY ASSURANCE / QUALITY CONTROL

Samples were obtained using industry accepted protocols for sample treatment, preservation, and equipment decontamination. Sampling equipment was decontaminated between sample locations and a clean pair of nitrile gloves used for the collection of each sample into laboratory supplied glass sampling jars.

Samples were placed on ice on-site and maintained on ice during transport to the testing laboratories. One duplicate soil sample identified as D1 (duplicate of primary sample SS1) was submitted to the laboratory for analysis for quality control purposes. Comparison between the primary and duplicate samples are presented in the results summary tables in Appendix B.

The Relative Percent Differences (RPDs) were calculated for the duplicate sample and presented in the results summary table in Appendix B.

The duplicate RPDs were within the control limit of 40% and indicated generally good correlation between the primary and duplicate samples.

In addition to the field quality control procedures, the laboratory conducted internal quality control testing including surrogates, blanks, and laboratory duplicate samples. The results are presented with the laboratory test results in Appendix B.

All laboratory quality control data is within acceptable limits for the tests carried out. Therefore, on the basis of the results of the field and laboratory quality control procedures and testing, the data is considered to reasonably represent the concentrations of contaminants in the soils at the sample locations at the time of sampling and the results can be adopted for this assessment.

6 RESULTS

6.1 Surface and Subsurface Conditions

The soil types recorded in surface samples are summarised below in Table 4.

Table 4: Summary of Subsurface Conditions (surface samples)

Sample ID	Description
SS1-SS2	Topsoil / Fill: Silty Gravelly CLAY, low plasticity, brown / dark brown, gravel, fine to coarse grained, some roots
SS3-SS4	Topsoil: Silty CLAY, low plasticity, black / dark grey, some roots (western part)
SS5-SS6	Topsoil: Silty SAND, fine to medium grained, black / dark grey, some roots (central and eastern parts)

6.2 Laboratory Results

An appraisal of the laboratory test results presented in Appendix B is provided below with reference to the adopted soil investigation and screening levels discussed in Section 4:

- Concentrations of heavy metals were either below the laboratory limit of reporting or below the adopted health investigation criteria for a Residential A site in each of the samples analysed, although it is noted that an elevated concentration of lead was apparent in sample SS1 elevated concentrations of zinc were apparent in samples SS1 and SS2 relative to the other samples which were collected from the eastern and southern sides of the shed respectively in the north-west corner of the site;
- Concentrations of TRH were either below the laboratory limit of reporting or below the adopted health investigation criteria for a Residential A site in each of the samples analysed;
- The concentrations of TRH C_{16}-C_{34} fraction were above the laboratory limit of reporting but well below the adopted ESLs in samples SS1, SS4 and SS6. The samples were collected from the eastern side of the shed in the north-west corner, around the perimeter of the farm dam in the central-west and from topsoil in the central part of the site respectively;
- The concentrations of TRH C_{34}-C_{40} fraction were above the laboratory limit of reporting but well below the adopted ESLs in sample SS6 which was collected from topsoil in the central part of the site;
- Concentrations of PAH, BTEX, PCB and OC/OP pesticides were below the laboratory limit of reporting in each of the samples analysed; and
- Asbestos was not detected in each of the soil samples analysed.

7 Conceptual Site Model

Based on the site observations and knowledge obtained about site activities as outlined above, a conceptual site model (CSM) has been developed.

7.1 Potential Sources of Contamination

Potential Areas of Environmental Concern (AECs) and Chemicals of Concern (COCs) identified for the assessment are outlined in Table 5.

Table 5: Potential AECs and COCs

AEC	Mode of Potential Contamination	Potential COCs	Likelihood of Contamination
AEC1: Existing shed in the north-west corner	Potential spillage or leaks of stored fuels/oils and agro-chemicals. Potentially hazardous building materials.	Heavy Metals, TRH, BTEX, PAH, OC/OPP Asbestos, lead, zinc	Low to Moderate Moderate
AEC2: Fill mound beneath existing shed in north-west corner	Importation of potentially contaminated fill	Heavy Metals, TRH, BTEX, PAH, PCB, OC/OPP and asbestos	Low to moderate
AEC3: Old truck body in north-west area along eastern lot boundary	Potential spillage or leaks of fuel/oil/lubricant	Heavy Metals, TRH, BTEX, PAH	Low to moderate
AEC4: Existing farm dams in the central-west and north-east areas	Presence of potentially contaminated dam excavation spoil	Heavy Metals, TRH, BTEX, PAH, PCB, OC/OPP	Low
AEC5: Former farming / grazing activities	Potential spillage or leaks of stored fuels/oils/lubricants and agro-chemicals	Heavy Metals, TRH, BTEX, PAH	Low
AEC6: Unidentified fill of unknown origin	Importation of potentially contaminated fill	Heavy Metals, TRH, BTEX, PAH, PCB, OC/OPP and asbestos	Low
AEC7: Unidentified waste from illegal dumping	Potential spillage or leaks of fuels/oils and/or presence of potential hazardous building materials	Heavy Metals, TRH, BTEX, PAH, PCB, OC/OPP and asbestos	Low
Heavy Metals - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc *BTEX - Benzene, Toluene, Ethylbenzene and Xylene* *TRH - Total Recoverable Hydrocarbons* *PAH – Polycyclic Aromatic Hydrocarbons* *PCB – Polychlorinated Biphenyls* *OC/OPP – Organochlorine and Organophosphorus Pesticides*			

The approximate locations of the AEC's are shown on Figure 3.

7.2 Potential Exposure Pathways and Receptors

Based on the site observations and knowledge obtained about site activities as outlined above, potential exposure pathways and receptors identified for the assessment are summarised in Table in Table 6.

Table 6: Potential Exposure Pathways and Receptors

Chemicals of Concern	Key Pathways	Key Receptors
Asbestos, heavy metals	Generation of dust, notably during earthworks or from landscaped areas which is inhaled	Onsite - Construction and site workers, future site users Offsite – Occupants and users of adjacent sites
Heavy metals, TRH, BTEX, PAH, OC/OPP	Skin contact / ingestion, plant uptake	Onsite - Construction and site workers, future site users, vegetation in landscaped areas
Heavy Metals, TRH, BTEX, PAH, OC/OPP	Surface runoff and leaching of soils	Offsite - Surface water ecosystems and users of surface water and groundwater

Heavy Metals - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc
BTEX - Benzene, Toluene, Ethylbenzene and Xylene
TRH - Total Recoverable Hydrocarbons
PAH – Polycyclic Aromatic Hydrocarbons
PCB – Polychlorinated Biphenyls
OC/OPP – Organochlorine and Organophosphorus Pesticides

8 DISCUSSION

A Stage 1 desktop site contamination assessment was required to assess past and present potentially contaminating activities and contamination types with regard to the site's suitability for future residential land use.

Previous activities on the site appear to have been limited to low intensity farming and grazing and vegetation clearing and maintenance. Based on historical aerial imagery, low intensity grazing / farming activities are likely to have taken place as the majority of the site has remained as open paddocks over time.

The existing shed in the north-west corner appears to have been constructed sometime between 1980 and 1997. In addition, the existing farm dams in the central-west and north-east corner of the site appear to have been constructed between 1980 and 1997.

Generally, the site does not appear to have changed significantly over the assessed history with the majority remaining as open paddocks with no structures present.

Identified AEC's included existing shed, fill mound beneath the shed, old truck body in the north-west along the eastern lot boundary, existing farm dams, former farming and grazing activities, unidentified fill and potentially waste from illegal dumping (if any).

The results of laboratory analysis of surface soil samples collected from targeted locations (AEC's outlined above), revealed concentrations of the chemicals of concern within the six samples analysed were either below the laboratory detection limit, or below the adopted health investigation criteria for a Residential A site. Asbestos was not detected in each of the six soil samples submitted for analysis.

Arsenic and lead concentrations were below the adopted EILs in all samples analysed. Due to the preliminary nature of this investigation physio-chemical properties of the soil were not determined to facilitate calculation of soil specific EILs for copper, chromium, nickel and zinc. Concentrations of some of these heavy metals appear to be elevated, notably within samples SS1 and SS2, such that some potential ecological receptors could be affected, notably growth of some plant species.

The concentrations of TRH C_{16}-C_{34} fraction were above the laboratory limit of reporting but well below the adopted ESLs in samples SS1, SS4 and SS6. The samples were collected from the eastern side of the shed in the north-west corner, around the perimeter of the farm dam in the central-west and from topsoil in the central part of the site respectively. The concentrations of TRH C_{34}-C_{40} fraction were above the laboratory limit of reporting but well below the adopted ESLs in sample SS6 which was collected from topsoil in the central part of the site.

The remaining samples and fractions reported concentrations below the laboratory limit of reporting. Due to the absence of visual and olfactory evidence of contamination (hydrocarbon odour and staining), the presence of TRH in the above samples may have come from minor spills or leaks from machinery and therefore may be indicative of perhaps higher concentrations of petroleum hydrocarbons being present elsewhere in the vicinity of the samples, or the reported concentrations could possibly be due to natural organic matter within the surface soils.

9 CONCLUSIONS & RECOMMENDATIONS

It is recommended that some nominal soil sampling be undertaken within the existing shed footprint and adjacent areas following its removal; assuming it is to be removed. Soil samples should be analysed for a broad suite of contaminants and asbestos and physio-chemical properties of the soil should be determined to facilitate calculation of soil specific EILs to further assess risk to potential ecological receptors.

It is recommended that a licenced asbestos assessor be engaged to undertake a Hazardous Materials Survey (HMS) of the existing shed if it is to be demolished.

Should evidence of contaminated soils such as hydrocarbon odour and staining be identified following the removal of the old truck body then an experience consultant should be engaged without delay. Additional soil sampling beneath the old truck body may then be required.

Should any fill materials be encountered that require removal off site, assessment for a *Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014* in accordance with the *Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 – the Excavated Natural Material (ENM) Order 2014,* will be required.

The investigation works undertaken were of limited scope and provide a preliminary assessment of identified AECs. Should any materials suspected of being contaminated (by way of visual or olfactory evidence) be encountered during development of the site, it is recommended that

advice from a suitably qualified and experienced environmental consultant be sought without delay.

Based on the results obtained in this investigation, it is considered that the site can be made suitable for the proposed residential land use with regard to the presence of soil contamination, provided the recommendations and advice of this report are adopted, and site preparation works are conducted in accordance with appropriate site management protocols and legislative requirements.

10 PRELIMINARY WASTE CLASSIFICATION

Table 2 of the '*Waste Classification Guidelines (2014)*' nominates a suite of analytes to be tested (Column 1) and also provides the maximum concentration (CT1) allowable within the soil for classification without the need for additional toxicity characteristics leaching procedure (TCLP) testing for both general solid waste (Column 2) and restricted solid waste (Column 3) for each analyte. Should the CT1 values be exceeded, the guidelines provide a Specific Contaminant Concentration (SCC) value to allow further evaluation of contaminant concentrations in conjunction with TCLP testing.

The initial laboratory results indicate that the site soils which were sampled during this investigation would meet the requirement for General Solid Waste with the exception of the surface fill where the shed in the north-west of the site is situated (sample SS1) which would classify as Restricted Solid Waste due to elevated lead concentrations exceeding the General Solid Waste criteria. It is likely that if TCLP testing were to be undertaken that this classification could be reduced to General Solid Waste.

Given the preliminary nature of the investigation, it is recommended that further waste classification testing of site soils be undertaken should they be unsuitable to remain onsite. The testing should be undertaken prior to construction work commencing to prevent delays during the testing and reporting process.

11 LIMITATIONS

This report comprises the results of an investigation carried out for a specific purpose and client as defined in the document. The report should not be used by other parties or for purposes or projects other than those assumed and stated within the report, as it may not contain adequate or appropriate information for applications other than those assumed or advised at the time of its preparation. The contents of the report are for the sole use of the client and no responsibility or liability will be accepted to any third party. The report should not be reproduced either in part or in full, without the express permission of Regional Geotechnical Solutions Pty Ltd.

Contaminated site investigations are based on data collection, judgment, experience, and opinion. By nature, these investigations are less exact than other engineering disciplines. The findings presented in this report and used as the basis for the recommendations presented herein were obtained using normal, industry accepted practises and standards. To our knowledge, they represent a reasonable interpretation of the general condition of the site. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points.

Recommendations regarding ground conditions referred to in this report are estimates based on the information available at the time of its writing. Estimates are influenced and limited by the fieldwork method and testing carried out in the site investigation, and other relevant information as has been made available. In cases where information has been provided to Regional Geotechnical Solutions for the purposes of preparing this report it has been assumed that the information is accurate and appropriate for such use. No responsibility is accepted by Regional Geotechnical Solutions for inaccuracies within any data supplied by others.

If site conditions encountered during construction vary significantly from those discussed in this report, Regional Geotechnical Solutions Pty Ltd should be contacted for further advice.

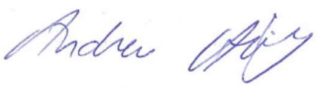
This report alone should not be used by contractors as the basis for preparation of tender documents or project estimates. Contractors using this report as a basis for preparation of tender documents should avail themselves of all relevant background information regarding the site before deciding on selection of construction materials and equipment.

If you have any questions regarding this project, or require any additional consultations, please contact the undersigned.

For and on behalf of

Regional Geotechnical Solutions Pty Ltd

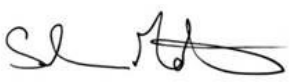
Prepared by



Andrew Hills

Senior Environmental Engineer

Reviewed by

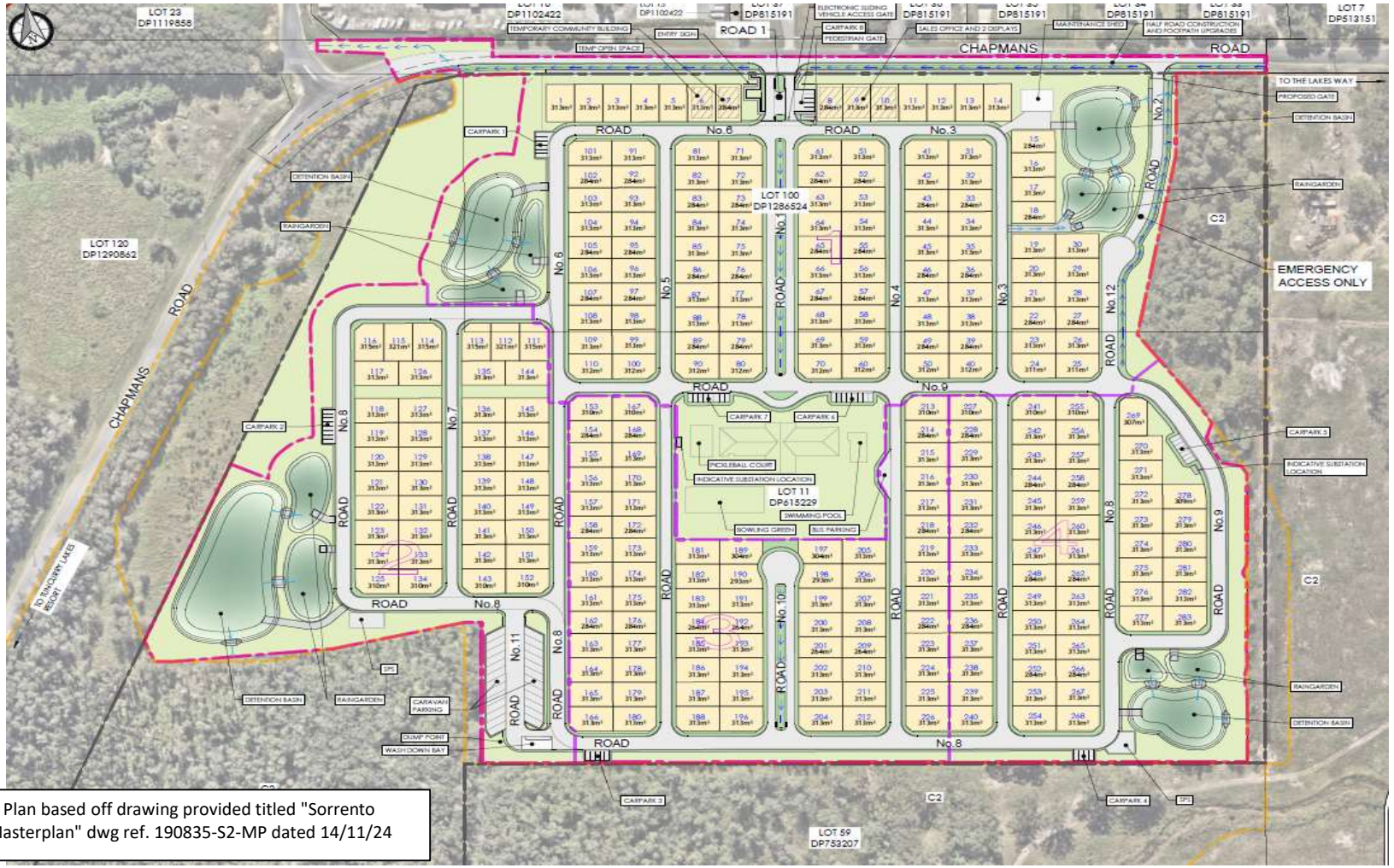


Steve Morton

Principal Geotechnical Engineer

Figures

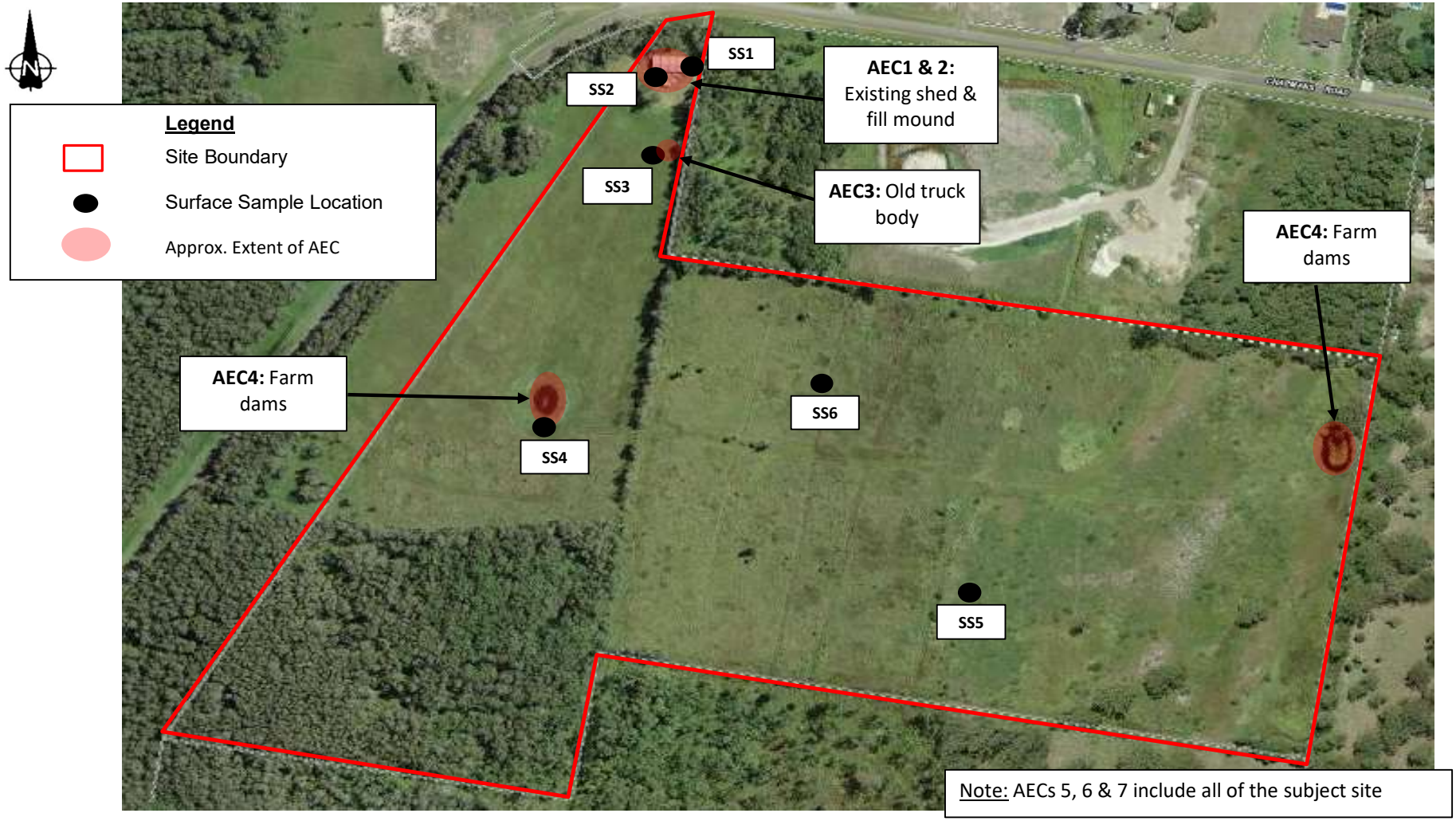
REGIONAL GEOTECHNICAL SOLUTIONS	**Client:**	Allam Property Group	Job No.	RGS03357.1
	Project:	Proposed MHE - Stage 2 82 Chapmans Road, Tuncurry	Drawn By:	APH
			Scale:	As Shown
			Date:	15-Aug-23
	Title:	Site Location Plan	Drawing No.	**Figure 1**



Plan based off drawing provided titled "Sorrento Masterplan" dwg ref. 190835-S2-MP dated 14/11/24

REGIONAL GEOTECHNICAL SOLUTIONS

Client:	Allam Property Group	Job No.	RGS03357.1
Project:	Proposed MHE - Stage 2	Drawn By:	APH
		Scale:	As Shown
	82 Chapmans Road, Tuncurry	Date:	20-Nov-24
Title:	Proposed Site Layout	Drawing No.	**Figure 2**



REGIONAL GEOTECHNICAL SOLUTIONS	**Client:**	Allam Property Group	Job No. RGS03357.1
	Project:	Proposed MHE - Stage 2 82 Chapmans Road, Tuncurry	Drawn By: APH Scale: As Shown Date: 16-Aug-23
	Title:	Site Plan - Areas of Environmental Concern	Drawing No. **Figure 3**

Appendix A

Site History Documentation

ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)
ABN 82 147 943 842

18/36 Osborne Road,
Manly NSW 2095

Mobile: +61412 169 809
Email: Search@alsearchers.com.au

16th August, 2023

REGIONAL GEOTECHNICAL SOLUTIONS PTY LTD
44 Bent Street,
WINGHAM, NSW, 2429

Attention: Andrew Hills,

RE: **82 Chapman Road,**
Tuncurry
RGS03357.1

Current Search

Folio Identifier 11/615229 (title attached)
DP 615229 (plan attached)
Dated 15th August, 2023
Registered Proprietor:
MICHELLE WOODFORD

Title Tree
Lot 11 DP 615229

Folio Identifier 11/615229

Certificate of Title Volume 14420 Folio 191

(a)

CTVol 8048 Folio 157

CTVol 3335 Folio 153

****

(b)

CTVol 13688 Folio 1

CTVol 12247 Folio 65

CTVol 8397 Folio's 22 & 23

CTVol 5609 Folio 6

CTVol 2643 Folio 31

****

Index

T – Transfer
TA – Transmission Application
G – Grant

****

Summary of proprietor(s)
Lot 11 DP 615229

Year	Proprietor(s)	
	(Lot 11 DP 615229)	
15 Jun 2023 todate	Michelle Woodford	TA
19 Dec 1994	Elaine Dorothy White	TA
08 Sep 1988	Robert George John White	
	(Lot 11 DP 615229 – CTVol 14420 Fol 191)	
07 Oct 1983	Robert George John White	T
25 May 1981	Civil Finance Pty Limited Pablos Pty Limited	

See Notes (a) & (b)

Note (a)

	(Lot A DP 106201 – Area 25 Acres – CTVol 8048 Fol 157)	
24 Oct 1973	Civil Finance Pty Limited	T
02 Jul 1973	Joyce Edith Stone, femme sole	T
23 Nov 1960	Theodore Henry Stone, labourer Joyce Edith Stone, his wife	T
	(Portion 59 & Part Portion 58 Parish Tuncurry – Area 65 Acres – CTVol 3335 Fol 153)	
31 Mar 1948	Leo Claude Wilson, contractor	T
19 May 1947	Robert Allan Cheers, milk vendor	T
10 Jul 1922	Trevelyn Lyons Brackenreg, contractor	T

****

Note (b)

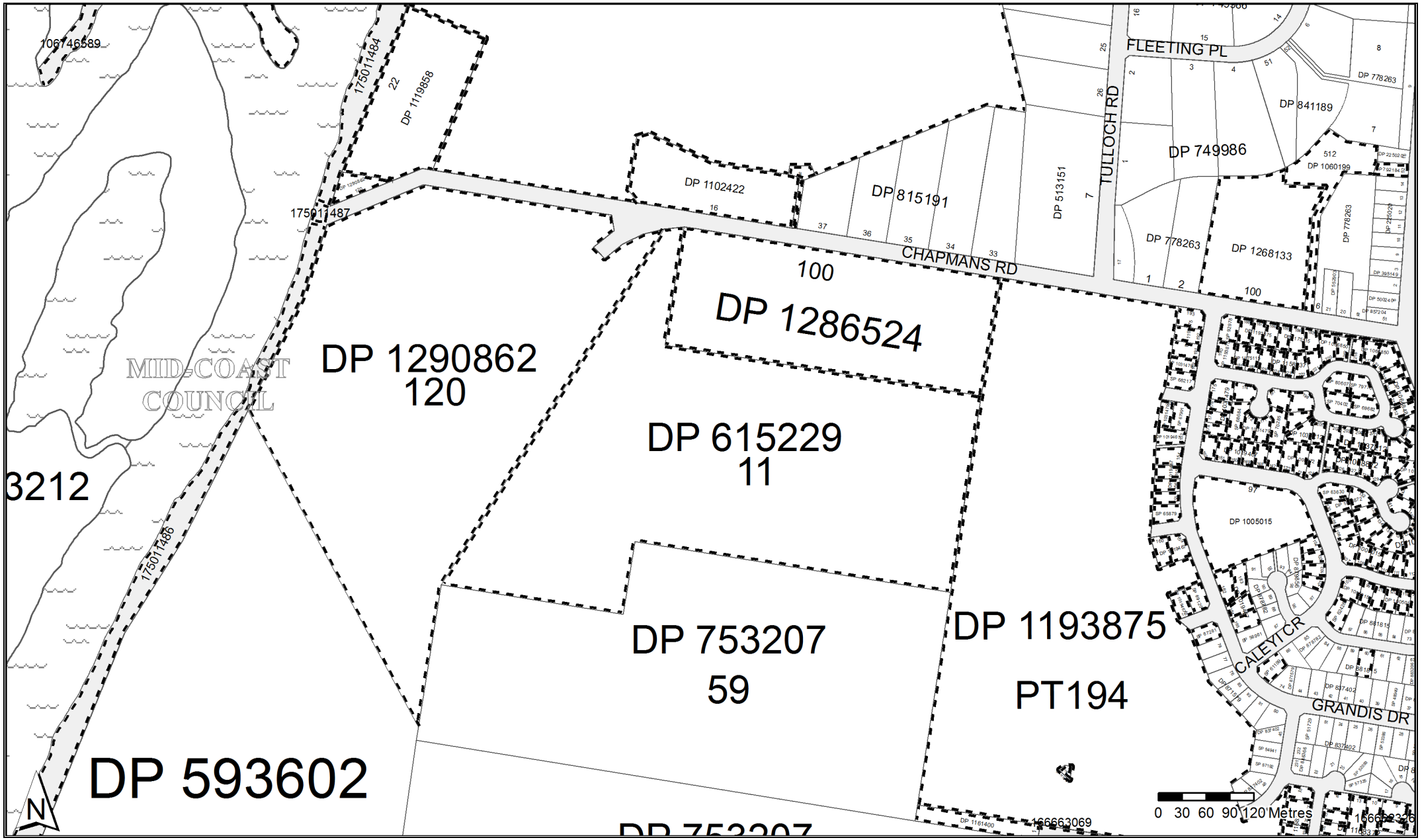
	(Lot 1 DP 593602 – CTVol 13688 Fol 1)	
25 Aug 1978	Pablos Pty Limited	T
	(Portions 14, 15 & 48 Parish Tuncurry – CTVol 12247 Fol 65)	T
19 Oct 1973	Pablos Pty Limited	T
(13 Aug 1978 to 25 Aug 1978)	*(lease to Tuncurry Lakeside Village Co-Operative Society Limited, of part)*	
	(Portions 14, 15 & 48 Parish Tuncurry – Area 139 Acres 1 Rood 14 Perches – CTVol 8397 Fol's 22 & 23)	
19 Sep 1962	Robert James Witt, butcher Ronald Eric Witt, butcher	T
	(Portions 14, 15 & 48 Parish Tuncurry – Area 139 Acres 1 Rood 24 Perches – CTVol 5609 Fol 6)	
01 Oct 1946	John David Witt, butcher	
	(Portions 14, 15 & 48 Parish Tuncurry – Area 140 Acres – CTVol 2643 Fol 31)	
17 Mar 1942	John David Witt, butcher	T
10 Nov 1922	Christopher Warbrick, gentleman	T
21 Mar 1919	Otto Ernest Brallowons, farmer	T
14 Feb 1916	John Charles Clerke, farmer	T
08 Feb 1916	Bank of New South Wales, grantee	G

****

Cadastral Records Enquiry Report : Lot 11 DP 615229

Ref : NOUSER

Locality : TUNCURRY
Parish : TUNCURRY
LGA : MID-COAST
County : GLOUCESTER



Report Generated 11:36:15 AM, 15 August, 2023

	Status	Surv/Comp	Purpose
DP615229			
Lot(s): 11			
DP1181822	REGISTERED	COMPILATION	EASEMENT
DP792184			
Lot(s): 52			
DP265768	REGISTERED	COMPILATION	EASEMENT
DP881815			
Lot(s): 60			
SP64883	REGISTERED	COMPILATION	STRATA PLAN
SEE AB563038 SP64883	TERMINATED	COMPILATION	STRATA PLAN
DP1005015			
Lot(s): 97, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005017			
Lot(s): 110, 111, 112, 118, 119, 120, 121			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1008872			
Lot(s): 122, 123, 124, 125, 126, 127, 128, 129, 130, 132			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1005017	HISTORICAL	SURVEY	SUBDIVISION
DP1009524			
Lot(s): 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1005017	HISTORICAL	SURVEY	SUBDIVISION
DP1008872	HISTORICAL	SURVEY	SUBDIVISION
DP1019467			
Lot(s): 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 159, 160, 162, 163, 164, 165, 167			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1031479			
Lot(s): 169, 171, 172, 174, 175, 176, 177, 178, 180			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1037212			
Lot(s): 193, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1060199			
Lot(s): 512			
DP792184	HISTORICAL	COMPILATION	SUBDIVISION
DP1066848			
Lot(s): 211, 212, 213, 214, 215			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION

	Status	Surv/Comp	Purpose
DP1066850			
Lot(s): 216, 217, 218, 219, 220			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1066848	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION
DP1102422			
Lot(s): 14			
DP777764	HISTORICAL	SURVEY	SUBDIVISION
DP1029928	HISTORICAL	SURVEY	SUBDIVISION
Lot(s): 14, 15, 16			
DP861713	HISTORICAL	SURVEY	SUBDIVISION
DP1102427			
Lot(s): 195			
DP837402	HISTORICAL	SURVEY	SUBDIVISION
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1114881			
Lot(s): 112			
DP253116	HISTORICAL	COMPILATION	DEPARTMENTAL
DP753207	HISTORICAL	COMPILATION	CROWN ADMIN NO.
DP809081	HISTORICAL	SURVEY	SUBDIVISION
NSW GAZ. 07-03-2008 Folio : 1462 TRANSFER OF CROWN ROAD TO COUNCIL			
DP1119858			
Lot(s): 23			
DP1152134	REGISTERED	SURVEY	LEASE
Lot(s): 22, 23			
DP777764	HISTORICAL	SURVEY	SUBDIVISION
DP861713	HISTORICAL	SURVEY	SUBDIVISION
DP1029928	HISTORICAL	SURVEY	SUBDIVISION
DP1102422	HISTORICAL	SURVEY	RESUMPTION OR ACQUISITION
Lot(s): 22			
DP614708	HISTORICAL	SURVEY	SUBDIVISION
DP1158537			
Lot(s): 221, 222, 223, 224, 225			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1066848	HISTORICAL	SURVEY	SUBDIVISION
DP1066850	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION
DP1161400			
Lot(s): 1			
NSW GAZ. 16-09-2011 Folio : 5537 CLOSED ROAD LOT 1 DP1161400			

	Status	Surv/Comp	Purpose
DP1168372			
Lot(s): 2, 8, 9, 10, 13, 14, 15, 16, 19, 20, 21, 22			
DP753207	HISTORICAL	COMPILATION	CROWN ADMIN NO.
NSW GAZ. 02-12-2011 Folio : 6917 REVOCATION OF RESERVATION OF CROWN LAND RESERVE NO. 753207 - LOTS 1-26 DP1168372			
DP1175115			
Lot(s): 183, 184, 185			
DP1193875	REGISTERED	SURVEY	SUBDIVISION
Lot(s): 181, 182, 183, 184, 185			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1066848	HISTORICAL	SURVEY	SUBDIVISION
DP1066850	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION
DP1158537	HISTORICAL	SURVEY	SUBDIVISION
DP1193875			
Lot(s): 186, 187, 188, 190, 191, 192, 193, 194			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1066848	HISTORICAL	SURVEY	SUBDIVISION
DP1066850	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION
DP1158537	HISTORICAL	SURVEY	SUBDIVISION
DP1175115	HISTORICAL	SURVEY	SUBDIVISION
DP1268133			
Lot(s): 100			
DP778263	HISTORICAL	SURVEY	SUBDIVISION
DP792184	HISTORICAL	COMPILATION	SUBDIVISION
DP1060199	HISTORICAL	SURVEY	SUBDIVISION
DP1245120	HISTORICAL	SURVEY	CONSOLIDATION
SUNRISE SUPPORTED LIVING TUNCURRY UNITS NUMBERED 1-117 SHOWN IN PLAN WITH MEMORANDUM AR897353			
DP1286524			
Lot(s): 100			
DP304132	HISTORICAL	COMPILATION	UNRESEARCHED
DP1290862			
Lot(s): 120			
DP615229	HISTORICAL	SURVEY	SUBDIVISION
Road			
Polygon Id(s): 166662326, 166663069			
NSW GAZ. 23-07-2004 Folio : 6067 TRANSFER OF CROWN ROAD TO COUNCIL			
NSW GAZ. 15-10-2004 Folio : 8000 TRANSFER OF CROWN ROAD TO COUNCIL			
SP61199			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
SP62428			
DP879856	HISTORICAL	SURVEY	SUBDIVISION

		Status	Surv/Comp	Purpose
SP63630				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1005017	HISTORICAL	SURVEY	SUBDIVISION
	DP1008872	HISTORICAL	SURVEY	SUBDIVISION
SP65879				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
SP67281				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
SP67991				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
SP68217				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
SP68684				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
SP69120				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
SP69682				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
	DP1037212	HISTORICAL	SURVEY	SUBDIVISION
SP70285				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
SP70402				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
	DP1037212	HISTORICAL	SURVEY	SUBDIVISION
SP79770				
	DP871579	HISTORICAL	SURVEY	SUBDIVISION
	DP1005015	HISTORICAL	SURVEY	SUBDIVISION
	DP1019467	HISTORICAL	SURVEY	SUBDIVISION
	DP1031479	HISTORICAL	SURVEY	SUBDIVISION
	DP1037212	HISTORICAL	SURVEY	SUBDIVISION

	Status	Surv/Comp	Purpose
SP80607			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
SP92978			
DP871579	HISTORICAL	SURVEY	SUBDIVISION
DP1005015	HISTORICAL	SURVEY	SUBDIVISION
DP1019467	HISTORICAL	SURVEY	SUBDIVISION
DP1031479	HISTORICAL	SURVEY	SUBDIVISION
DP1037212	HISTORICAL	SURVEY	SUBDIVISION
DP1066848	HISTORICAL	SURVEY	SUBDIVISION
DP1066850	HISTORICAL	SURVEY	SUBDIVISION
DP1102427	HISTORICAL	SURVEY	SUBDIVISION
DP1158537	HISTORICAL	SURVEY	SUBDIVISION
DP1175115	HISTORICAL	SURVEY	SUBDIVISION
DP1193875	HISTORICAL	SURVEY	SUBDIVISION

Road

Polygon Id(s): 106746589, 175011484, 175011486, 175011487

NSW GAZ. 03-02-2017 Folio : 305

TRANSFER OF CROWN ROAD TO COUNCIL

Plan	Surv/Comp	Purpose
DP225020	SURVEY	SUBDIVISION
DP395149	SURVEY	UNRESEARCHED
DP500240	SURVEY	SUBDIVISION
DP513151	SURVEY	SUBDIVISION
DP552903	SURVEY	SUBDIVISION
DP593602	SURVEY	SUBDIVISION
DP615229	SURVEY	SUBDIVISION
DP749986	SURVEY	SUBDIVISION
DP753207	COMPILATION	CROWN ADMIN NO.
DP753212	COMPILATION	CROWN ADMIN NO.
DP777348	SURVEY	SUBDIVISION
DP778263	SURVEY	SUBDIVISION
DP792184	COMPILATION	SUBDIVISION
DP815191	SURVEY	SUBDIVISION
DP837402	SURVEY	SUBDIVISION
DP841189	SURVEY	SUBDIVISION
DP846366	SURVEY	SUBDIVISION
DP857204	COMPILATION	SUBDIVISION
DP871579	SURVEY	SUBDIVISION
DP878782	SURVEY	SUBDIVISION
DP879856	SURVEY	SUBDIVISION
DP881815	SURVEY	SUBDIVISION
DP883206	SURVEY	SUBDIVISION
DP1005015	SURVEY	SUBDIVISION
DP1005017	SURVEY	SUBDIVISION
DP1008872	SURVEY	SUBDIVISION
DP1009524	SURVEY	SUBDIVISION
DP1019467	SURVEY	SUBDIVISION
DP1031479	SURVEY	SUBDIVISION
DP1037212	SURVEY	SUBDIVISION
DP1060199	SURVEY	SUBDIVISION
DP1066848	SURVEY	SUBDIVISION
DP1066850	SURVEY	SUBDIVISION
DP1102422	SURVEY	RESUMPTION OR ACQUISITION
DP1102427	SURVEY	SUBDIVISION
DP1114881	SURVEY	SUBDIVISION
DP1119858	SURVEY	SUBDIVISION
DP1158537	SURVEY	SUBDIVISION
DP1161400	COMPILATION	CROWN FOLIO CREATION
DP1168372	SURVEY	SUBDIVISION
DP1175115	SURVEY	SUBDIVISION
DP1193875	SURVEY	SUBDIVISION
DP1268133	SURVEY	CONSOLIDATION
DP1286524	SURVEY	REDEFINITION
DP1290862	SURVEY	SUBDIVISION
SP48949	COMPILATION	STRATA PLAN
SP50527	COMPILATION	STRATA PLAN
SP51729	COMPILATION	STRATA PLAN
SP52093	COMPILATION	STRATA PLAN
SP53386	COMPILATION	STRATA PLAN
SP54941	COMPILATION	STRATA PLAN
SP56961	COMPILATION	STRATA PLAN
SP57192	COMPILATION	STRATA PLAN
SP57325	COMPILATION	STRATA PLAN
SP61199	COMPILATION	STRATA PLAN
SP62428	COMPILATION	STRATA PLAN
SP63630	COMPILATION	STRATA PLAN
SP65879	COMPILATION	STRATA PLAN
SP67281	COMPILATION	STRATA PLAN
SP67991	COMPILATION	STRATA PLAN
SP68217	COMPILATION	STRATA PLAN
SP68684	COMPILATION	STRATA PLAN
SP69120	COMPILATION	STRATA PLAN
SP69682	COMPILATION	STRATA PLAN
SP70285	COMPILATION	STRATA PLAN

Plan	Surv/Comp	Purpose
SP70402	COMPILATION	STRATA PLAN
SP79770	COMPILATION	STRATA PLAN
SP80607	COMPILATION	STRATA PLAN
SP92978	COMPILATION	STRATA PLAN

12247065

[redacted]ICATE OF TITLE

NEW SOUTH WALES — [redacted] PROPERTY ACT, 1900

Crown Grant Vol 2643 Fol 31
Prior Title Vol 8397 Fols 22 and 23

Vol. 12247 Fol. 65

Edition issued 19.10.1973

N442674

CANCELLED

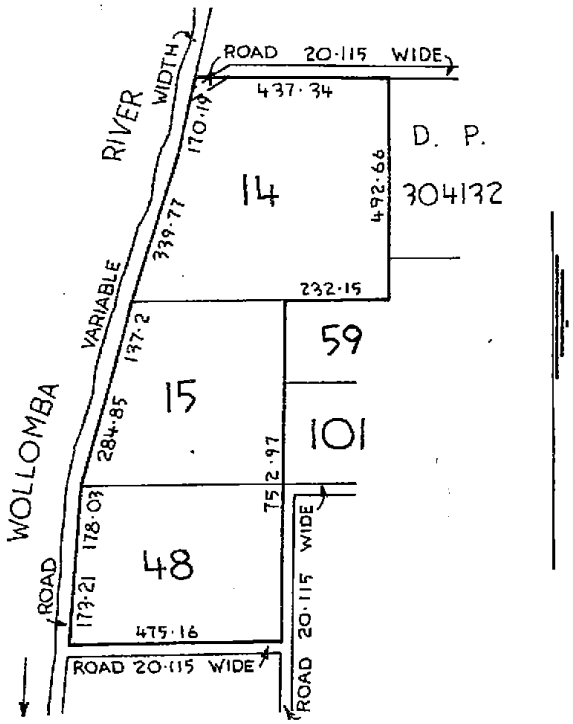
(Page 1) Vol. 12247 Fol. 65

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.

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



AREA 56·39 ha
THIS AREA DOES NOT INCLUDE THE AREA OF THE ROAD

N442674

REDUCTION RATIO 1:12500

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Portions 14, 15 and 48 in the Shire of Manning Parish of Tuncurry and County of Gloucester. EXCEPTING THEREOUT the road shown in the plan hereon and the minerals reserved by the Crown Grant.

FIRST SCHEDULE

PABLOS PTY LIMITED.

SECOND SCHEDULE

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

Registrar General

N442675
N934544 m.
Q259170 (
CT 29-11-77
DP593602
8/17.5.78
Q533437 W
8 D
Q810684 Lse
5 Tce
Lot 2 DP593602

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
This deed is cancelled as to whole New Certificates of Title have issued on 25-8-1978 for lots in Deposited Plan No. 593602 as follows:- Lots 1 + 2 Vol. 13688 Fol. 1 respectively. Vol 8538 Fol 101 to 250, Vol 8539 Vol 1 to 250 Vol 8540 Fol 1 to 200 respectively REGISTRAR GENERAL					

NEW CERTIFICATE(S) OF TITLE ISSUING ON D.P. 593602
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY DRAFTING BRANCH.

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
~~Mortgage~~	~~N934544~~	~~9-10-1973~~	~~to General Credits (Finance) Pty. Ltd.~~	~~19-9-1974~~		Discharged	Q533438	
~~Caveat~~	~~Q259170~~		~~by General Credits (Finance) Pty. Ltd.~~	~~30-6-1977~~		Withdrawn	Q533437	
			Interests created pursuant to Section 88B Conveyancing Act, 1919, by the registration of Deposited Plan 593602	7 2 1978				
Lease	Q810684	—	of lot 2 in DP 593602 to Tuncurry Lakeside Village Co-operative Society Limited	~~16-8-1978~~				
			Expires 30.6.2017	18.8.1978				

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

[redacted]TICATE OF TITLE

NEW SOUTH WALES

[redacted]L PROPERTY ACT, 1900

13688-001

Crown Grant Vol. 2643 Fol. 31

Prior Title Vol.12247 Fol. 65

Vol. 13688 Fol. 1

Edition issued 25-8-1978

(Page 1) Vol. 13688 Fol. 1

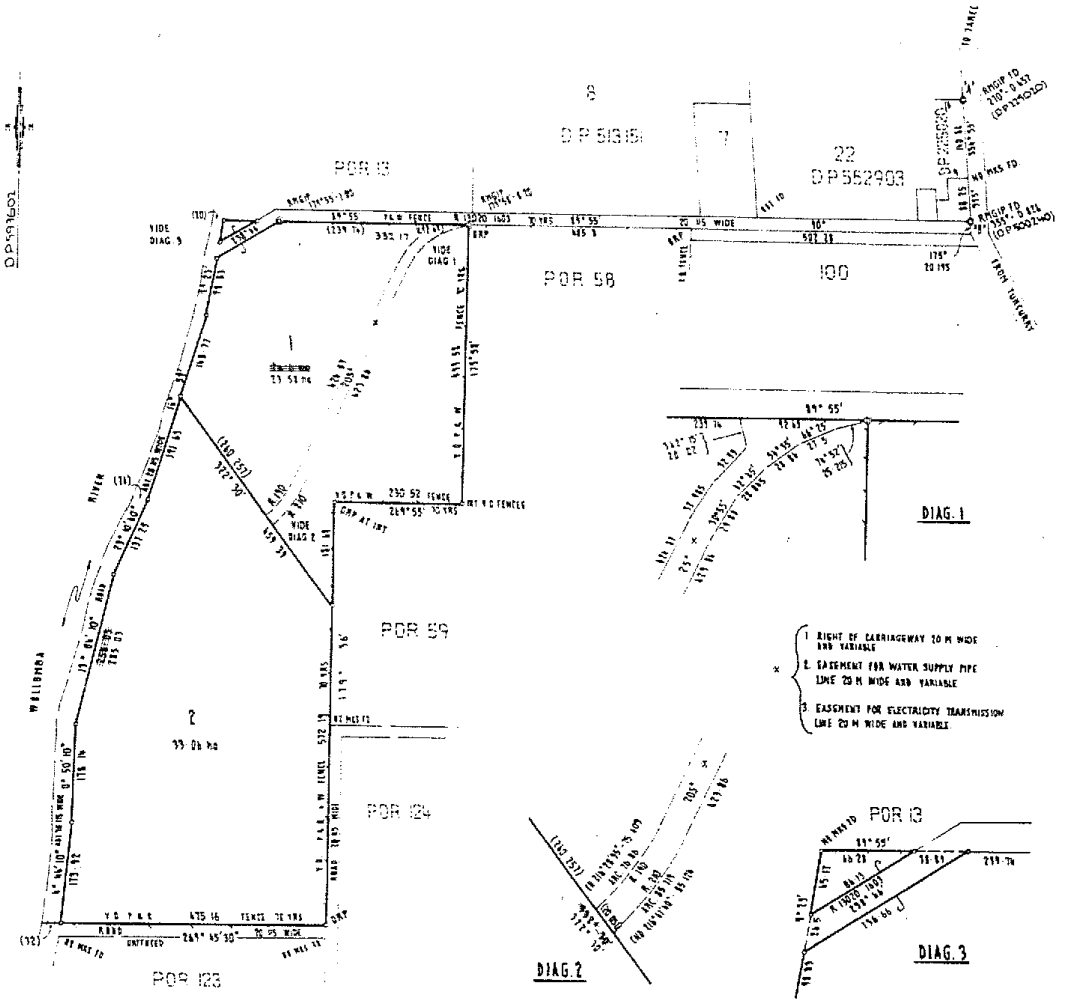
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Registrar General.

CANCELLED

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 593602 at Tuncurry in the Shire of Manning Parish of Tuncurry and County of Gloucester. EXCEPTING THEREOUT the minerals reserved by the Crown Grant.

FIRST SCHEDULE

PABLOS PTY. LIMITED.

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. DP593602 Right of carriageway affecting the land shown so burdened in Deposited Plan 593602.
3. DP593602 Easement for water supply pipe line affecting the land shown so burdened in Deposited Plan 593602.
4. DP593602 Easement for electricity transmission line affecting the land shown so burdened in Deposited Plan 593602.

Vol. 13688 Fol. 1

Q898505 MR
CT13-2-81
Mtg Q898505
16.6.82.

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	Signature of Registrar General

NEW CERTIFICATE(S) OF TITLE ISSUED ON DP 615229
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO
SURVEY DRAWING ABOVE.

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	PARTICULARS	REGISTERED	Signature of Registrar General	CANCELLATION	
Mortgage	Q898505	to General Credits (Finance) Pty. Ltd.	13-10-1978			
	DP. 615229	Interests created pursuant to Section 88B Conveyancing Act, 1919				
		by the registration of Deposited Plan 615229.	27.4.1981			

This Deed is cancelled as to Whole
New Certificates of Title have issued on 25/5/1981
for lots in Deposited Plan No 615229 as follows:
Lots 11 12 Vol 14420 Fol 191 192 respectively.

REGISTRAR GENERAL

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

14420191

[redacted]FICATE OF TITLE

NEW SOUTH WALES

...AL PROPERTY ACT, 1900

Crown Grants Vol. 2643 Fol. 31
Vol. 2773 Fol. 74

Prior Titles Vol. 8048 Fol.157
Vol.13688 Fol. 1

Vol. 14420 Fol. 191

EDITION ISSUED

25 5 1981

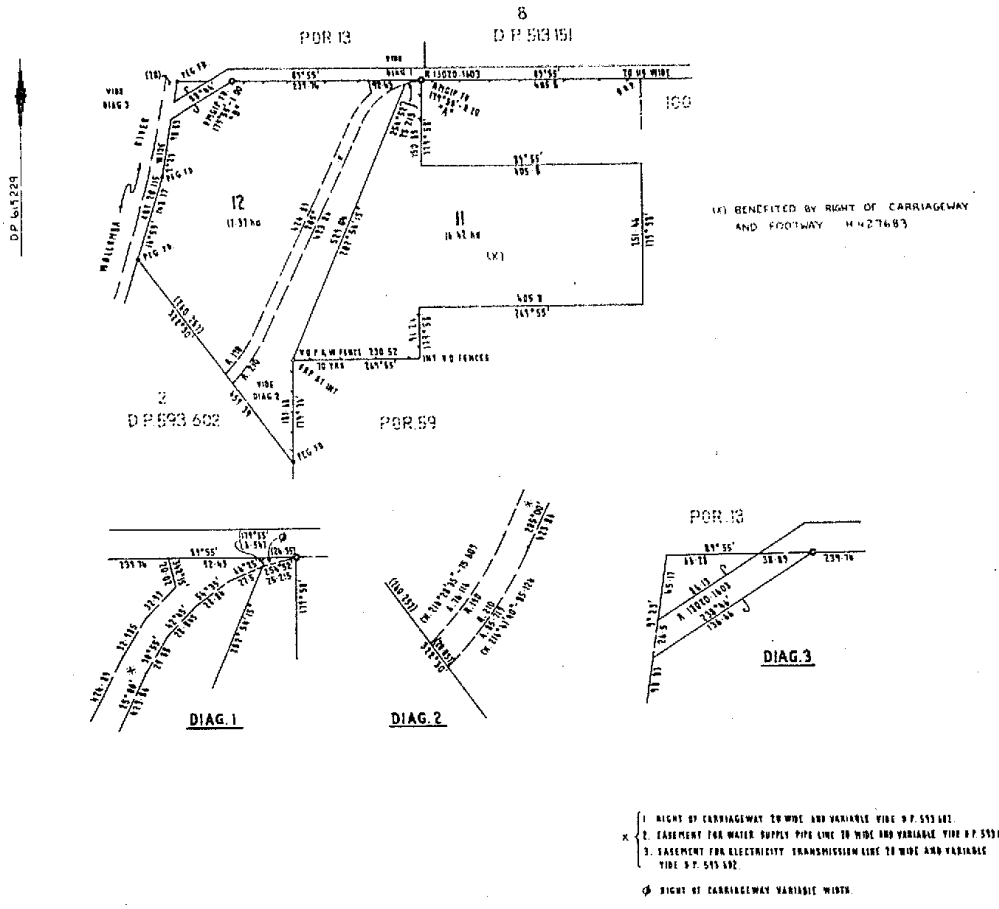
14420 Fol. 191 (Page 1) Vol. .....

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.

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



X { 1. RIGHT OF CARRIAGEWAY 20 WIDE AND VARIABLE VIDE D.P. 593 602.
2. EASEMENT FOR WATER SUPPLY PIPE LINE 10 WIDE AND VARIABLE VIDE D.P. 593 602
3. EASEMENT FOR ELECTRICITY TRANSMISSION LINE 20 WIDE AND VARIABLE VIDE D.P. 615 592.

Ø RIGHT OF CARRIAGEWAY VARIABLE WIDTH.

5

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 11 in Deposited Plan 615229 at Tuncurry in the Shire of Manning Parish of Tuncurry and County of Gloucester. EXCEPTING THEREOUT the minerals reserved by the Crown Grants.

FIRST SCHEDULE

~~CIVIL FINANCE PTY. LIMITED as to the part of the land above described formerly comprised in Certificate of Title Volume 8048 Fol.157 and PABLOS PTY. LIMITED as to the part formerly comprised in Certificate of Title Volume 13688 Folio 1.~~

GRM

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grants above referred to.
2. H427683 P Right of carriageway and footway appurtenant to the part of the land above described shown so benefited affecting the land shown so burdened in Deposited Plan 106201.
~~3. N934543 Mortgage to General Credits (Finance) Pty. Ltd. affecting the part of the land above described formerly comprised in Certificate of Title Volume 8048 Folio 157.~~ Discharged T692642
~~4. Q259171 Caveat by General Credits (Finance) Pty. Ltd. affecting the part of the land above described formerly comprised in Certificate of Title Volume 8048 Folio 157~~ Withdrawn T964799
~~5. Q898505 Mortgage to General Credits (Finance) Pty. Ltd. affecting the part of the land above described formerly comprised in Certificate of Title Volume 13688 Folio 1.~~ Discharged T692641
RCZ 6. DP615229 P Right of Carriageway appurtenant to the land above described.

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

2/64

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	Registrar General
Robert George John White by Transfer T692643. Registered 7-10-1983	[signature]

SECOND SCHEDULE (continued)

PARTICULARS	Registrar General	CANCELLATION

NOTATIONS AND UNREGISTERED DEALINGS

Mtg N934543 17.6.82
T692640 20/10/83
T764799 w/d

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY T

97-03TA

[redacted]

TRANSMISSION APPLICATION

Section 93 Real Property Act 1900

U 856019 A

$10-

Office of State Revenue use only

(A) **LAND**

Show no more than 20 References to Title.

Identifier 11/809081, Identifier 1/562100,
Volume 6745 Folio 229, Volume 14420 Folio 191,
Volume 5107 Folio 24 NOW BEING A/384069

11/615229

(B) **REGISTERED DEALING**

If applicable.

(C) **LODGED BY**

L.T.O. Box	Name, Address or DX and Telephone
3145M	DENLYN LEGAL SEARCHING PTY. LIMITED PHONE: 264 2438 DX 1217 REFERENCE (max. 15 characters): EST WHITE/JAV

(D) **DECEASED REGISTERED PROPRIETOR**

ROBERT GEORGE WHITE

(E) **APPLICANT**

TA ELAINE DOROTHY WHITE of 8 Brookpine Place, West Pennant Hills

(F) I, the Applicant, being entitled as devisee of the **will/~~estate~~** of the Deceased Registered Proprietor (who died on 30th January 1994) pursuant to **Probate/~~Letters of Administration~~** No. 116108/94 granted on 27th October 1994 to ELAINE DOROTHY WHITE, apply to be registered as proprietor of the estate or interest of the Deceased Registered Proprietor in the **~~Land/Registered Dealing~~** specified above.

(G) Certified correct for the purposes of the Real property Act 1900. **DATE** 18th November 1994

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

Signature of Witness

JOHN ANTHONY VAUGHAN
Name of Witness (BLOCK LETTERS)

20 WALLIS ST, FORSTER
SOLICITOR Address of Witness

E. J. White
Signature of Applicant

EVIDENCE SIGHTED & RETURNED (office use only) ✓

CHECKED BY (office use only) JAV

DOD: 30/1/94
Pbte 116108/94

Ausdoc Commercial and Law Stationers

Auto Enroll complete 19/12.

CONSENT OF EXECUTOR OR ADMINISTRATOR

(H)

I, ELAINE DOROTHY WHITE Executor of the will /~~Administrator of the estate~~

of the Deceased Registered Proprietor, hereby consent to this application.

Signature of Witness

JOHN ~~ANTHONY~~ VAUGHAN

Name of Witness (BLOCK LETTERS)

90 WALLIS ST, FORSTER

Address of Witness

SOLICITOR

E. M. White

Signature of Executor/Administrator

INSTRUCTIONS FOR COMPLETION

STAMP DUTY: if the Applicant is a devisee, beneficiary, next-of-kin or otherwise beneficially entitled or if the Deceased Registered Proprietor died prior to 31 December 1981 the application must be presented to the Office of State Revenue prior to lodgment at the Land Titles Office.

1. The Application must be completed clearly and legibly in permanent, dense, black or dark blue non-copying ink. If using a dot-matrix printer the print must be letter-quality.
2. Do not use an eraser or correction fluid to make alterations: rule through rejected material. Initial each alteration in the lefthand margin.
3. If the space provided at any point is insufficient, you may annex additional pages. These must be the same size as the form; paper quality, colour. etc, must conform to the requirements set out in Land Titles Office Information Bulletin No. 19. All pages of any annexure must be signed by the person executing the Application and any attesting witness.
4. The following instructions relate to the marginal letters on the application.

(A) LAND
Show the relevant Reference to Title. If there are more than 20 show none in this panel. Place ALL of them on an annexure (see 3 above) with 20 per sheet.

(B) REGISTERED DEALING
Show the registration number of any lease, mortgage or charge in regard to which the Applicant is applying to be registered as a proprietor.

(C) LODGED BY
This section relates to the person or firm lodging the Application at the Land Titles Office.
Reference (max. 15 characters) This is optional. Any slashes, dots, blank spaces, etc, will be counted as characters.

(D) DECEASED REGISTERED PROPRIETOR
Show the name in full. Address and occupation need not be shown.

(E) APPLICANT
Show the name in full. Address and occupation need not be shown.

(F) WILL/ESTATE, etc
Amend "will/estate", "Probate/Letters of Administation" and "Land/Registered Dealing" as appropriate.
In the relevant spaces show the capacity (executor, devisee, etc) in which the Applicant is entitled to apply, the number and date of grant of the Probate or Letters of Administration pursuant to which the application is made, and the name of the person to whom the grant was made.

(G) EXECUTION
General The application must be executed by or on behalf of the Applicant.
By the Applicant Personally The application must be signed in the presence of an adult witness who is not an Applicant and who knows the party executing personally. The witness should complete the appropriate section of the application.
By the Applicant's Attorney The Power of Attorney must be registered in the General Register of Deeds at the Land Titles Office. The execution should take the form, "AB by her attorney XY *[full name]* pursuant to Power of Attorney Book 1234 Number 567".
Under Authority If the application is made pursuant to any statutory, judicial or other authority, except a Power of Attorney (see above), the nature of the authority should be disclosed.
By a Corporation under Seal The execution should include a statement that the seal has been properly affixed, for example, "... pursuant to a resolution of the board of directors ...". Alternatively, all those attesting the affixing of the seal must state their position in the corporation.

(H) CONSENT OF EXECUTOR OR ADMINISTRATOR
This is required only where the Applicant claims to be entitled other than as executor, administrator or trustee.

The completed Application must be lodged by hand at the LAND TITLES OFFICE, Queen's Square, Sydney, together with the Certificate of Title, the probate or letters of administration (or a copy thereof certified by a solicitor to be a true copy) and a completed Notice of Sale.

If you have any questions about filling out the form, please call 228-6666 and ask for our Customer Services Branch.

Film with U856019 Re. C/Ts.
1) V 14420 F 191.
2) V 5107 F 24.

STATUTORY DECLARATION

==========

I, ELAINE DOROTHY WHITE

of 8 Brookpine Place, West Pennant Hills in the State of New South Wales and being the Executrix of the Will dated 29th October, 1993 and Widow of the Late Robert George John White

do solemnly and sincerely declare as follows:

1. The person described as ROBERT GEORGE JOHN WHITE shown as Proprietor on Certificate of Title Volume 14420 Folio 191 being Lot 11 in DP 615229 and

2. shown as one of the Proprietor on Certificate of Title Volume 5107 Folio 24 being Lot 9 Part of Lot 10 in DP 16496 and being also part of 100 acres (Portion 194 of Parish) is

[a] One and the same person as that of ROBERT GEORGE WHITE shown as Proprietor on Certificate of Title Identifier 11/809081 being Lot 11 in DP 809081.

[b] One and the same person as that of ROBERT GEORGE WHITE shown as Proprietor on Certificate of Title Identifier 1/562100 being Lot 1 in DP562100.4

[c] One and the same person as that of ROBERT GEORGE WHITE shown as Proprietor on Certiicate of Title Volume 6745 folio 229 being Lot A part Portion 26.

[d] One and the same person as that of ROBERT GEORGE WHITE shown as Deceased Registered Proprietor on Transmission Application dated 18th November, 1994.

[e] One and the same person as that of ROBERT GEORGE WHITE shown on Probate numbered 116108/94 dated 27/10/94.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the Oaths Act, 1900 [as amended].

Subscribed and declared at FORSTER)
this 6th day of DECEMBER) E White.
one thousand nine hundred and NINETY FOUR)
before me)

M Draper JP.
M. DRAPER

PLAN FORM 2

Plan Drawing only to appear in this space

• OFFICE USE ONLY

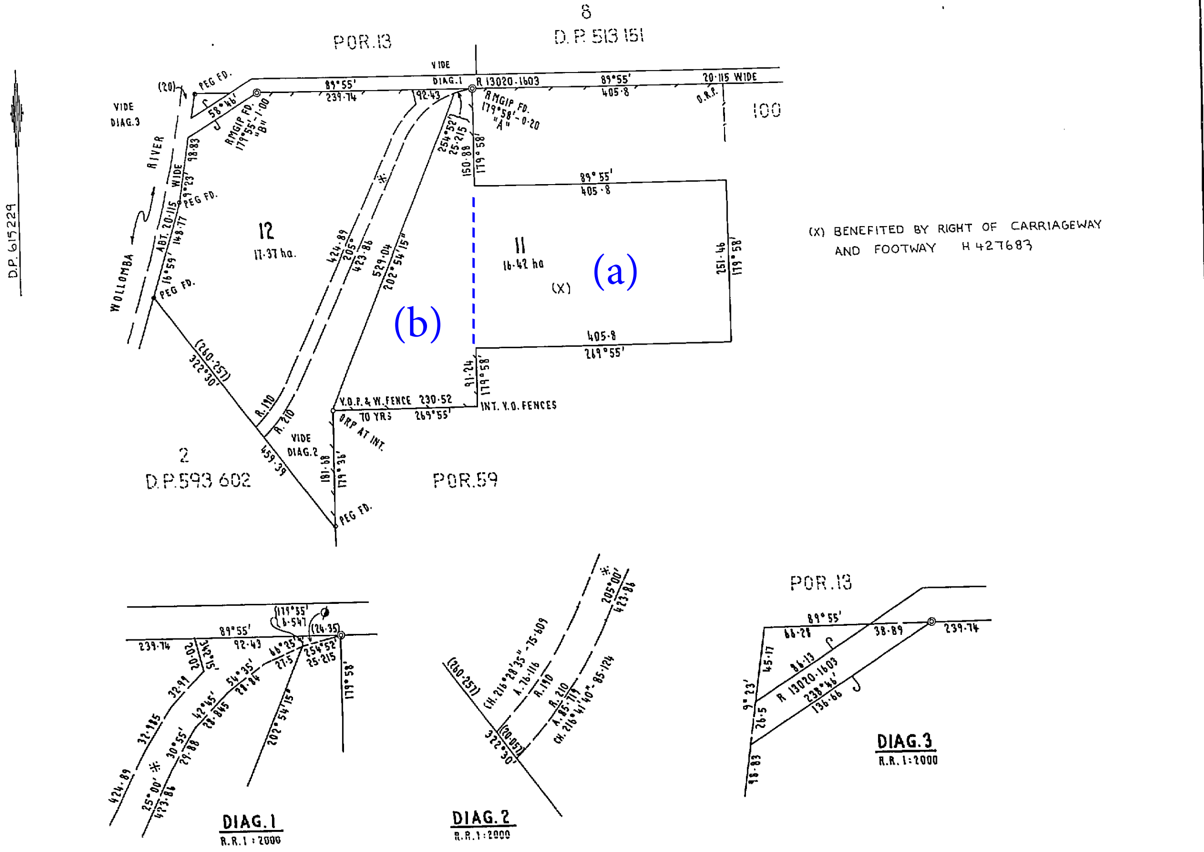
Signatures and seals only.

The common seal of Civil Finance Pty Limited was hereunto affixed in accordance with the articles of Association by one of the directors in the presence of:

SECRETARY

GENERAL CREDITS (FINANCE) PTY LIMITED BY ITS DULY CONSTITUTED ATTORNEY David Clive Nicholls MANAGER Newcastle BRANCH OF THE COMPANY WHO CERTIFIES THAT HE OCCUPIES THAT POSITION AND STATES THAT HE HAS NO NOTICE OF THE REVOCATION OF THE POWER OF ATTORNEY REGISTERED No. 129016 UNDER THE AUTHORITY OF WHICH HE HAS JUST EXECUTED ...

WITNESS.



(X) BENEFITED BY RIGHT OF CARRIAGEWAY AND FOOTWAY H 427683

※ 1. RIGHT OF CARRIAGEWAY 20 WIDE AND VARIABLE VIDE D.P. 593 602.
2. EASEMENT FOR WATER SUPPLY PIPE LINE 20 WIDE AND VARIABLE VIDE D.P. 593 602
3. EASEMENT FOR ELECTRICITY TRANSMISSION LINE 20 WIDE AND VARIABLE VIDE D.P. 513 602.

ϕ RIGHT OF CARRIAGEWAY VARIABLE WIDTH.

DP 615229

Registered:	27·4·1981
C.A.:	Nº 2760 of 29-8-1980
Title System:	TORRENS
Purpose:	SUBDIVISION
Ref. Map:	PARISH #
Last Plan:	D.P. 593602

PLAN OF SUBDIVISION OF LOT 1 D.P. 593 602 & PART OF PORTION 58 PARISH OF TUNCURRY

Reduction Ratio 1: 5000
Lengths are in metres.

Mun./Shire ~~City~~	MANNING
Locality:	TUNCURRY
Parish:	TUNCURRY
County:	GLOUCESTER

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

I, ROBERT LEONARD POWYS of MONTEATH & POWYS, NEWCASTLE a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan is accurate and has been made ~~(1) by me~~ (2) under my immediate supervision in accordance with the Survey Practice Regulations, 1933, and was completed on † 1-3-80 73/22-2

Signature
Surveyor registered under Surveyors Act, 1929, as amended.
Datum Line of Azimuth: "A"-"B"
*Strike out either (1) or (2). †Insert date of survey.

Panel for use only for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT, 1919-1964 AS AMENDED IT IS INTENDED TO CREATE:

RIGHT OF CARRIAGEWAY VARIABLE WIDTH

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 34B 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. 2760
Date 29.8.80
(Signature)
DEPUTY Council Clerk
*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 operation of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.
†Delete if inapplicable.

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEYOR'S REFERENCE: 73/22-2

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

29th April, 1981

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
15/8/2023 11:37AM

FOLIO: 11/615229

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 14420 FOL 191

Recorded	Number	Type of Instrument	C.T. Issue
28/3/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
8/9/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
19/12/1994	U856019	TRANSMISSION APPLICATION	EDITION 1
30/3/2001	7467221	DEPARTMENTAL DEALING	
30/3/2007	AD25767	CAVEAT	
16/7/2009	AE691408	WITHDRAWAL OF CAVEAT	
16/7/2009	AE633488	TRANSFER RELEASING EASEMENT	EDITION 2
2/1/2013	DP1181822	DEPOSITED PLAN	EDITION 3
15/6/2023	AT174668	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 4

*** END OF SEARCH ***

advlegs PRINTED ON 15/8/2023

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 11/615229

SEARCH DATE	TIME	EDITION NO	DATE
15/8/2023	11:37 AM	4	15/6/2023

LAND

LOT 11 IN DEPOSITED PLAN 615229
AT TUNCURRY
LOCAL GOVERNMENT AREA MID-COAST
PARISH OF TUNCURRY COUNTY OF GLOUCESTER
TITLE DIAGRAM DP615229

FIRST SCHEDULE

MICHELLE WOODFORD (AE AT174668)

SECOND SCHEDULE (3 NOTIFICATIONS)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
2 DP615229 RIGHT OF CARRIAGEWAY APPURTENANT TO THE LAND ABOVE DESCRIBED
3 DP1181822 EASEMENT FOR BATTER 6 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1181822

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

advlegs PRINTED ON 15/8/2023

Appendix B

Laboratory Test Result Sheets

REGIONAL GEOTECHNICAL SOLUTIONS

Client: Allam Property Group
Job No. RGS03357.1
Project: Proposed MHE - Stage 2
Location: 82 Chapmans Road, Tuncurry

Comparison of Contamination Analysis Results with Adopted Investigation Levels (Results in mg/kg)

SAMPLE	DEPTH (m)	MATERIAL	ASBESTOS	TOTAL RECOVERABLE HYDROCARBONS					PAH		Pesticides Total		BTEX		PCBs	Heavy Metals						
				C6-C10	C10-C16	C16-C34	C34-C40	TOTAL 10-40	Total	b-a-p (TEQ)	OCP	OPP	Sum	Napthalene		As	Cd	Cr (total)#	Cu	Pb	Ni	Zn	Hg
SS1	0.0 - 0.2	Topsoil / Fill	No	<10	<50	180	<100	180	<0.5	<0.5	<0.2	<0.2	<0.2	<1	<0.1	<5	<1	18	30	234	12	414	<0.1
SS2	0.0 - 0.2	Topsoil / Fill	No	<10	<50	<100	<100	<50	<0.5	<0.5	<0.2	<0.2	<0.2	<1	<0.1	10	<1	19	17	36	12	1860	<0.1
SS3	0.0 - 0.2	Topsoil	No	<10	<50	<100	<100	<50	<0.5	<0.8	<0.2	<0.2	<0.2	<1	<0.1	<5	<1	4	<5	<5	5	21	<0.1
SS4	0.0 - 0.2	Topsoil	No	<10	<50	160	<100	160	<0.5	<0.8	<0.2	<0.2	<0.2	<1	<0.1	<5	<1	5	<5	<5	4	9	<0.1
SS5	0.0 - 0.2	Topsoil	No	<10	<50	<100	<100	<50	<0.5	<0.5	<0.2	<0.2	<0.2	<1	<0.1	<5	<1	<2	<5	<5	<2	<5	<0.1
SS6	0.0 - 0.2	Topsoil	No	<10	<50	260	190	450	<0.5	<0.8	<0.2	<0.2	<0.2	<1	<0.1	<5	<1	6	<5	<5	3	<5	<0.1
D1 (duplicate SS1 0.0 - 0.2)	0.0 - 0.2	Fill	----	----	----	----	----	----	----	----	----	----	----	----	----	7	<1	26	40	323	13	499	<0.1
RINSATE1		Water	----	<20	----	----	----	----	----	----	----	----	<1	<5	----	----	----	----	----	----	----	----	----
D1RPD%			----	----	----	----	----	----	----	----	----	----	----	----	----	33.3	0.0	36.4	28.6	32.0	8.0	18.6	0.0
CRITERIA (NEPM 2013)																							
Health Investigation Level (HIL):*			*0.001% (w/w)*						*300*	*3*	*240*	*6*			*1*	*100*	*20*	*100#*	*6000*	*300*	*400*	*7400*	*40*
*Health Screening Level (HSL)***				*45*	*110*	*NL*	*NL*	*NL*															
*Ecological Screening Level (ESL)****				*180*	*120*	*1300*	*5600*	*NL*					*45-125*										
Ecological Investigation Level (EIL)@											*180*			*170*		*100*				*1100*			

CRITERIA:
* Health Based Investigation Levels for Residential A (NEPM 2013)
** Health Screening Level (F2) for residential land use and coarse grained soil (sand), 0 - 1m depth
*** Ecological Screening Level for residential land use
@ Ecological Investigation Level - aged (>2 years) for residential landuse
# Chromium VI
Speciation testing confirmed only Chromium III present
<LOR - Below the laboratory limit of reporting

REGIONAL GEOTECHNICAL SOLUTIONS

Client: Allam Property Group
Job No. RGS03357.1
Project: Proposed MHE - Stage 2
Location: 82 Chapmans Road, Tuncurry

Summary Table - Comparison of Contamination Analysis Results With Waste Classification Threshold Limits (Results in mg/kg)

SAMPLE	MATERIAL	DEPTH (m)	ASBESTOS	TOTAL PETROLEUM HYDROCARBONS					PAH	PCBs (Total)	OC/OP Pesticides	HEAVY METALS									
				C6-C9	C10-C14	C15-C28	C29-C36	TOTAL				Arsenic	TCLP	Cadmium	TCLP	Nickel	TCLP	Lead	TCLP	Mercury	TCLP
SS1	Topsoil / Fill	0.0 - 0.2	No	<10	<50	110	110	220	<0.5	<0.1	<0.2	<5		<1		12		234		<0.1	
SS2	Topsoil / Fill	0.0 - 0.2	No	<10	<50	<100	<100	<50	<0.5	<0.1	<0.2	10		<1		12		36		<0.1	
SS3	Topsoil	0.0 - 0.2	No	<10	<50	<100	<100	<50	<0.5	<0.1	<0.2	<5		<1		5		<5		<0.1	
SS4	Topsoil	0.0 - 0.2	No	<10	<50	<100	130	130	<0.5	<0.1	<0.2	<5		<1		4		<5		<0.1	
SS5	Topsoil	0.0 - 0.2	No	<10	<50	<100	<100	<50	<0.5	<0.1	<0.2	<5		<1		<2		<5		<0.1	
SS6	Topsoil	0.0 - 0.2	No	<10	<50	160	220	380	<0.5	<0.1	<0.2	<5		<1		3		<5		<0.1	
THRESHOLD LIMITS																					
GENERAL SOLID WASTE	*CT1*											*100*		*20*		*40*		*100*		*4*	
	SCC1			*650*				*10000*	*200*	*<50*	*250*	*500*		*100*		*1050*		*1500*		*50*	
	TCLP1											*5*		*1*		*2*		*5*		*0.2*	
RESTRICTED SOLID WASTE	*CT2*											*400*		*80*		*160*		*400*		*16*	
	SCC2			*2600*				*40000*	*800*	*<50*	*1000*	*2000*		*400*		*4200*		*6000*		*200*	
	TCLP2											*20*		*4*		*8*		*20*		*0.8*	

NOTES

CT	Contaminant Threshold (without TCLP)
SCC	Specific Contaminant Concentrations (used with TCLP)
TCLP	Toxicity Characteristics Leaching Procedure (used with SCC)
Shaded	Exceeds General Solid Waste Threshold = Restricted Solid Waste
BOLD and Shaded	Exceeds Restricted Solid Waste Threshold = Hazardous Waste

CRITERIA:

Waste Classification - Classifying Waste, Part 1 (*NSW EPA 2014*)

CERTIFICATE OF ANALYSIS

Work Order	: **ES2323676**	Page	: 1 of 12
Client	: **REGIONAL GEOTECHNICAL SOLUTION**	Laboratory	: Environmental Division Sydney
Contact	: Andrew Hills	Contact	: Customer Services ES
Address	: 44 BENT STREET WINGHAM NSW, AUSTRALIA 2429	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 6553 5641	Telephone	: +61-2-8784 8555
Project	: RGS03357.1 PROPOSED MHE - STAGE 2	Date Samples Received	: 17-Jul-2023 09:14
Order number	: ----	Date Analysis Commenced	: 18-Jul-2023
C-O-C number	: ----	Issue Date	: 24-Jul-2023 15:22
Sampler	: ----		
Site	: 82 Chapmans Road, Tuncurry		
Quote number	: EN/222		
No. of samples received	: 8		
No. of samples analysed	: 8		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005T: Poor precision was obtained for Zinc on sample ES2323650 # 016. Confirmed by re-digestion and reanalysis.
- EP075(SIM): LOR for samples raised due to high amount of moisture content.
- Amendment (18/07/2023): This report has been amended to alter the site details, project reference code or order number. All analysis results are as per the previous report.
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS1 0.0-0.2	SS2 0.0-0.2	SS3 0.0-0.2	SS4 0.0-0.2	SS5 0.0-0.2
			Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00
Compound	CAS Number	LOR	Unit	ES2323676-001	ES2323676-002	ES2323676-003	ES2323676-004	ES2323676-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**14.2**	**28.7**	**51.2**	**53.7**	**15.1**
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	**No**	**No**	**No**	**No**
Asbestos (Trace)	1332-21-4	-	-	**No**	**No**	**No**	**No**	**No**
Asbestos Type	1332-21-4	-	--	**-**	**-**	**-**	**-**	**-**
Sample weight (dry)	----	0.01	g	**354**	**247**	**125**	**101**	**197**
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**	**A. SMYLIE**
Synthetic Mineral Fibre	----	-	--	**No**	**No**	**No**	**No**	**No**
Organic Fibre	----	-	--	**No**	**No**	**No**	**No**	**No**
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	**10**	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	**18**	**19**	**4**	**5**	<2
Copper	7440-50-8	5	mg/kg	**30**	**17**	<5	<5	<5
Lead	7439-92-1	5	mg/kg	**234**	**36**	<5	<5	<5
Nickel	7440-02-0	2	mg/kg	**12**	**12**	**5**	**4**	<2
Zinc	7440-66-6	5	mg/kg	**414**	**1860**	**21**	**9**	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS1 0.0-0.2	SS2 0.0-0.2	SS3 0.0-0.2	SS4 0.0-0.2	SS5 0.0-0.2
				Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00
Compound	CAS Number	LOR	Unit		ES2323676-001	ES2323676-002	ES2323676-003	ES2323676-004	ES2323676-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS1 0.0-0.2	SS2 0.0-0.2	SS3 0.0-0.2	SS4 0.0-0.2	SS5 0.0-0.2
				Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00
Compound	CAS Number	LOR	Unit		ES2323676-001	ES2323676-002	ES2323676-003	ES2323676-004	ES2323676-005
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**1.0**	**1.0**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.9**	**1.9**	**1.2**
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		**110**	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		**110**	<100	<100	**130**	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**220**	<50	<50	**130**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		**180**	<100	<100	**160**	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS1 0.0-0.2	SS2 0.0-0.2	SS3 0.0-0.2	SS4 0.0-0.2	SS5 0.0-0.2
				Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00	14-Jul-2023 00:00
Compound	CAS Number	LOR	Unit		ES2323676-001	ES2323676-002	ES2323676-003	ES2323676-004	ES2323676-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		**180**	<50	<50	**160**	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**99.1**	**90.8**	**93.2**	**88.8**	**108**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**97.6**	**88.5**	**93.8**	**95.9**	**97.7**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**91.3**	**82.1**	**78.7**	**83.8**	**81.5**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**89.1**	**91.7**	**92.5**	**82.3**	**83.8**
2-Chlorophenol-D4	93951-73-6	0.5	%		**89.9**	**92.2**	**91.7**	**82.4**	**83.9**
2.4.6-Tribromophenol	118-79-6	0.5	%		**70.0**	**76.1**	**75.0**	**72.6**	**67.7**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**89.0**	**89.9**	**88.8**	**78.3**	**82.6**
Anthracene-d10	1719-06-8	0.5	%		**89.8**	**90.9**	**92.0**	**80.7**	**82.7**
4-Terphenyl-d14	1718-51-0	0.5	%		**93.2**	**95.2**	**96.1**	**84.4**	**87.9**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**74.4**	**86.0**	**72.8**	**78.5**	**93.4**
Toluene-D8	2037-26-5	0.2	%		**91.0**	**94.3**	**79.8**	**82.6**	**98.1**
4-Bromofluorobenzene	460-00-4	0.2	%		**84.6**	**90.0**	**76.6**	**79.3**	**92.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS6 0.0-0.2	D1 0.0-0.2	----	----	----
			Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2323676-006	ES2323676-007	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**60.2**	**13.1**	----	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Asbestos Detected	1332-21-4	0.1	g/kg	**No**	----	----	----	----
Asbestos (Trace)	1332-21-4	-	-	**No**	----	----	----	----
Asbestos Type	1332-21-4	-	--	**-**	----	----	----	----
Sample weight (dry)	----	0.01	g	**147**	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	**A. SMYLIE**	----	----	----	----
Synthetic Mineral Fibre	----	-	--	**No**	----	----	----	----
Organic Fibre	----	-	--	**No**	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	**7**	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**6**	**26**	----	----	----
Copper	7440-50-8	5	mg/kg	<5	**40**	----	----	----
Lead	7439-92-1	5	mg/kg	<5	**323**	----	----	----
Nickel	7440-02-0	2	mg/kg	**3**	**13**	----	----	----
Zinc	7440-66-6	5	mg/kg	<5	**499**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS6 0.0-0.2	D1 0.0-0.2	----	----	----
				Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2323676-006	ES2323676-007	--------	--------	--------
					Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SS6 0.0-0.2	D1 0.0-0.2	----	----	----
				Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2323676-006	ES2323676-007	--------	--------	--------
					Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.8	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.8	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.8	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.8	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.8	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.8	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.8	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.8	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.8	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.8	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.8	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.8	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.8	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.8	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.8	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.8	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**1.0**	----	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.9**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		**160**	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		**220**	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		**380**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		**260**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		**190**	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**450**	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SS6 0.0-0.2	D1 0.0-0.2	----	----	----
			Sampling date / time	14-Jul-2023 00:00	14-Jul-2023 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2323676-006	ES2323676-007	--------	--------	--------
				Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**92.0**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**96.5**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**87.0**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**93.0**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**92.7**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**75.1**	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**89.9**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**92.8**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**96.4**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**79.7**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	**81.5**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	**79.4**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RINSATE 1	----	----	----	----
			Sampling date / time	14-Jul-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2323676-008	--------	--------	--------	--------
				Result	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ **Total Xylenes**	----	2	µg/L	<2	----	----	----	----
^ **Sum of BTEX**	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**86.7**	----	----	----	----
Toluene-D8	2037-26-5	2	%	**98.2**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	**94.0**	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	SS10.0-0.2 - 14-Jul-2023 00:00	Soil sample.
EA200: Description	SS20.0-0.2 - 14-Jul-2023 00:00	Soil sample.
EA200: Description	SS30.0-0.2 - 14-Jul-2023 00:00	Soil sample.
EA200: Description	SS40.0-0.2 - 14-Jul-2023 00:00	Soil sample.
EA200: Description	SS50.0-0.2 - 14-Jul-2023 00:00	Soil sample.
EA200: Description	SS60.0-0.2 - 14-Jul-2023 00:00	Soil sample.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

Appendix C

Letter from Dr David Tully CEnvP SC

Contaminated Land Solutions

4 September 2023

Ref: CLS0289.L01

Regional Geotechnical Solutions Pty Ltd
44 Brent Street
Wingham
NSW 2429

For the attention of Andrew Hills

Dear Andrew,

RE: Report Review: Stage 1 Site Contamination Assessment – Proposed Manufactured Home Estate – Stage 2, 82 Chapmans Road, Tuncurry

I, Dr David Tully of Contaminated Land Solutions Pty Ltd, am a Certified Environmental Practitioner Site Contamination Specialist (General Certified Environmental Practitioner certification no. 1138 and Site Contamination Specialist certification no. SC40084).

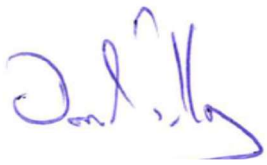
I confirm I have reviewed the Regional Geotechnical Solutions report entitled "*Stage 1 Site Contamination Assessment – Proposed Manufactured Home Estate – Stage 2, 82 Chapmans Road, Tuncurry*" (Ref: RGS03357.1-AB), dated 4 September 2023 and a copy of which I have retained.

I can confirm that on the basis of the information contained within the report, I support the conclusions and recommendations provided therein.

Should the client, regulator or local authority have any queries regarding the report review, I can be contacted by e-mail via david.tully@contaminatedlandsolutions.com.au. Specific queries regarding the content of the report should be addressed to Andrew Hills at Regional Geotechnical Solutions.

For and on behalf of

Contaminated Land Solutions Pty Ltd



Dr David Tully CEnvP SC
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