
**Report on Preliminary Site Investigation
(contamination) and Preliminary Waste
Classification Testing**

Proposed residential development

**5-7 Church & 42 Donald Street, Nelson Bay
NSW**

Prepared for Fortezza Group Pty Ltd

Project 227295.00

2 August 2024

Document History

Details

Project No.	227295.00
Document Title	Report on preliminary site investigation (contamination) and preliminary waste classification testing
Site Address	5-7 Church & 42 Donald Street, Nelson Bay NSW
Report Prepared For	Fortezza Group Pty Ltd
Filename	227295.00.R.001.Rev0

Status and Review

Status	Prepared by	Reviewed by	Date issued
Revision 0	Jason Lambert	Matthew Blackert	2 August 2024

Distribution of Copies

Status	Issued to
Revision 0	Fortezza Group Pty Ltd

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

Signature

Date

Author		2 August 2024
Reviewer		2 August 2024

Table of Contents

	Page No
1. Introduction	1
2. Proposed development	1
3. Scope of work	2
4. Site information.....	3
5. Environmental setting	4
6. Geotechnical Investigation (Douglas, 2024)	5
7. Site history	6
7.1 Historical aerial photography.....	6
7.2 Historical street level photography	6
7.3 Title deeds.....	9
7.4 Public registers and planning records.....	9
7.5 Site history integrity assessment.....	10
7.6 Summary of site history	11
8. Site walkover	11
9. Preliminary conceptual site model	13
10. Sampling and Analysis Quality Plan	16
10.1 Data quality objectives	16
10.2 Soil sampling rationale	17
11. Site assessment criteria	17
12. Results	17
12.1 Field work results	17
12.2 Asbestos field screening and material fragment testing	18
12.3 Laboratory analytical results.....	19
13. Discussion	20
13.1 Land use.....	20
13.2 Preliminary waste classification	20
13.3 Data quality assurance and quality control	21
14. Conceptual site model.....	21

15.	Conclusions and Recommendations.....	22
15.1	Key Findings.....	22
15.2	Remediation Requirements.....	22
15.3	Data Gaps.....	22
15.4	Recommendations	23
16.	References.....	23
17.	Limitations.....	24

Appendix A:	Drawing 1 – Test location plan Drawing 2 – Site features and photograph locations Proposed development drawings (Hayes Anderson Lynch Architects Pty Ltd drawings SD101 to SD312 revision Q dated 05/06/2024)
Appendix B:	About this report
Appendix C:	Site history information: Historical aerial photograph review Historical title deeds Section 10.7 planning certificates SafeWork NSW search
Appendix D:	Site photographs
Appendix E:	Data quality objectives
Appendix F:	Field work methods
Appendix G:	Site assessment criteria
Appendix H:	Borehole logs (6 to 10)
Appendix I:	Table I1 – Summary of asbestos field screening Table I2 – Summary of laboratory results – Land use Table I3 - Summary of laboratory results – Waste classification Laboratory test results (Envirolab report 356894) Chain of custody (field and despatch) Sample receipts
Appendix J:	Data quality report (QAQC) Table QA1 – Relative Percentage Difference Results – Soil Sampling

Report on preliminary site investigation (contamination) and preliminary waste classification testing

Proposed residential development

5-7 Church & 42 Donald Street, Nelson Bay NSW

1. Introduction

Douglas Partners Pty Ltd (Douglas) has been engaged by Fortezza Group Pty Ltd to prepare this preliminary site investigation for contamination (PSI) and preliminary waste classification testing undertaken for a proposed residential development for the site at 5-7 Church & 42 Donald Street, Nelson Bay NSW (the site). The site is shown on Drawing 1, Appendix A.

The investigation was undertaken with reference to Douglas' proposal 227295.00.P.001.Rev2 dated 26 June 2024.

The objective of the PSI is to assess the potential for contamination at the site based on past and present land uses and to comment on the need for further investigation and/or management with regard to the proposed development. It is understood that the report will be used to support a development application for the proposed development. The objectives of the preliminary waste classification testing was to provide an indication of soil contaminant concentrations, primarily within the proposed basement location (where possible), for assessment of off-site disposal options.

This investigation was undertaken concurrently with a geotechnical investigation, with geotechnical components reported separately in the geotechnical report (Douglas, 2024).

This report must be read in conjunction with all appendices including the notes provided in Appendix B.

The following key guidelines were consulted in the preparation of this report:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013); and
- NSW EPA *Guidelines for Consultants Reporting on Contaminated Land* (NSW EPA, 2020);
- NSW EPA *Waste Classification Guidelines* (NSW EPA, 2014).

2. Proposed development

With reference to available architectural drawings (Hayes Anderson Lynch Architects Pty Ltd (HAL) drawings SD101 to SD312 revision L dated 20/12/2024) it is understood that the proposed residential development, will comprise of the construction of a ten-storey residential apartment building with a two-level basement car park.

Based on supplied information, it is anticipated that cuts of up to 8 m within the western two thirds of the site would be required to facilitate the construction of the belowground car parking

area. Based on indicative sections provided on architectural drawings (HAL drawing SD312 revision Q) the finished floor level is proposed to be at around RL17.5 at basement level 2 and deeper at the proposed lift pit. Level of bulk excavation for the lift pit is not indicated on the provided drawing. Copies of available architectural drawings are provided in Appendix A.

A typical section of the proposed development is provided in Figure 1.

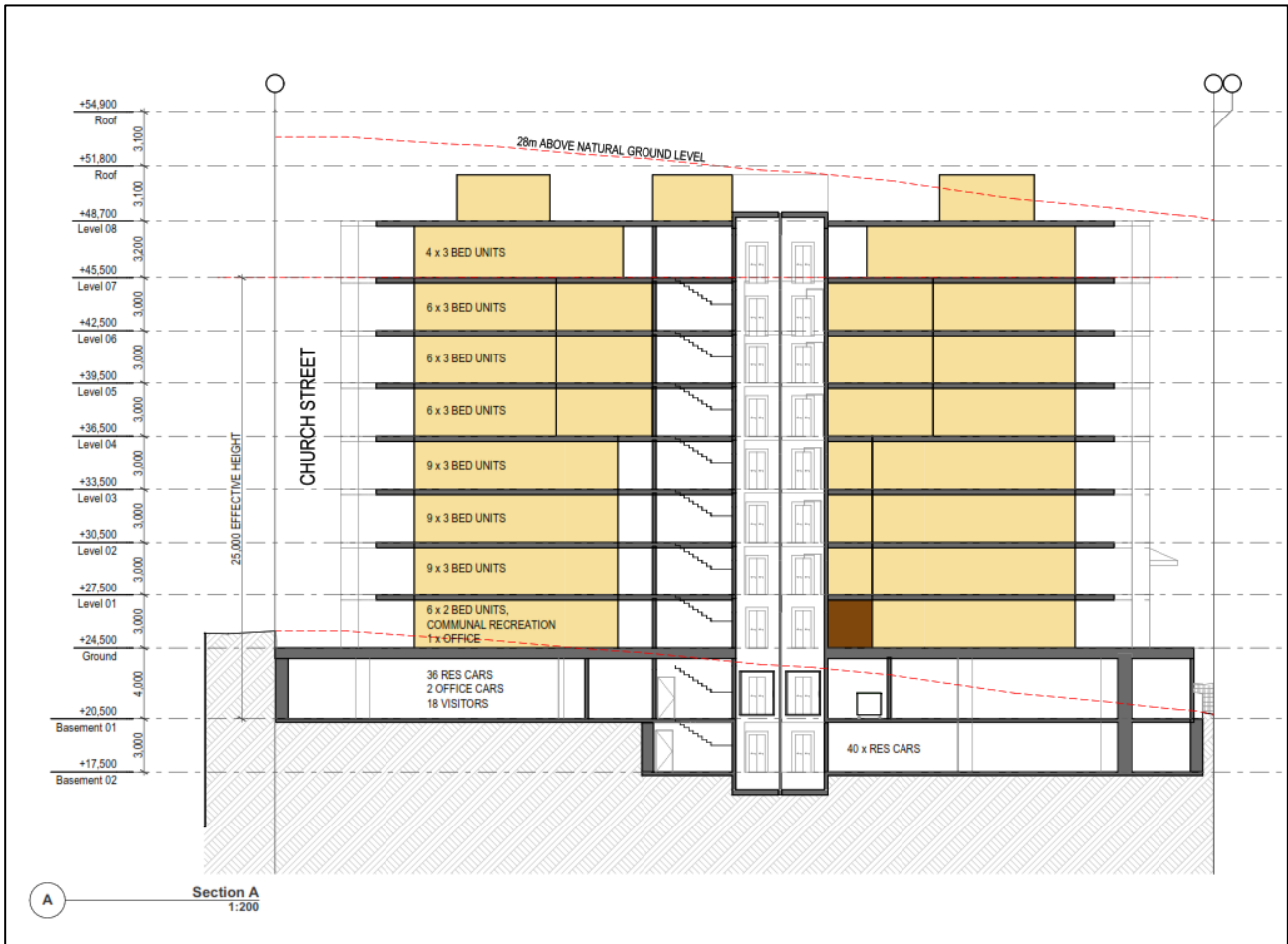


Figure 1: Section of the proposed development (figure adapted from HAL drawing SD312 revision Q dated 05/06/2024)

3. Scope of work

The scope of works are as follows:

- Review of available published information on the site, including geological, topographical, acid sulfate soil and soil landscape maps and registered groundwater bores;
- Brief review of available site history information, including the following sources:
 - o Aerial photograph records;
 - o Council and EPA records;
 - o Historical titles search (InfoTrack);

- o Section 10.7 (2 & 5) planning certificate for the site;
 - o SafeWork NSW search;
- Site walkover by an engineer from Douglas to assess current site condition and identify areas of potential contamination;
- Collection of soil samples from the geotechnical investigation boreholes at regular depth intervals for identification and testing purposes, with reference to standard contamination sampling protocols;
- Screening of soil samples collected for the presence of volatile organic compounds (VOCs) using a photoionisation detector (PID);
- Laboratory analysis of selected soil and material samples collected for a suite of relevant contaminants.
- Preparation of a preliminary conceptual site model (CSM) as required by NEPC (2013); and
- Preparation of this report.

4. Site information

Site address	5-7 Church & 42 Donald Street, Nelson Bay NSW
Legal description	Lot A, B DP 417172 and 15 DP 5616
Approximate area	2200 m ²
Zoning	Medium density residential (R3) and Local centre (E1)
Local council area	Port Stephens Council (PSC)
Current use	Residential and commercial (hairstylist)
Surrounding uses	North – Residential (apartments) East – Commercial (clothing shop) South – Residential (house/apartments) West – School (Tomaree community college)



Figure 1: Site location, approximate site boundary shown in red.

5. Environmental setting

Regional topography	Reference to NSW 2 m contours indicates the regional topography in the vicinity of the site generally dips to the north-east, with the highest elevation of approximately RL 40 (m AHD) (at hilltops to the south-west) and as low as RL 0 (at Nelson Bay to the north-east).
Site topography	Reference to NSW 2 m contours indicates the site levels range from the highest point of about RL 24 in the western area of the site, down to around RL 20 in the eastern area of the site.
Soil landscape	Reference to NSW Soil Landscapes of Central NSW index indicates the site is underlain by soils typical of the Fingal Head soil landscape which typically comprises gently undulating rises to rolling low hills comprised of high-level dunes and sand sheets mantling bedrock. Typical limitations of this soil landscape include localised shallow soils, widespread poor moisture availability, widespread non-cohesive soils, localised steep slopes, localised mass movement hazard, localised foundation hazard, widespread recharge zone, widespread wind erosion hazard.

Geology	Reference to NSW Seamless Geology mapping indicates the site is underlain by Pleistocene to quaternary aged coastal deposits which typically comprise sand. Reference to the NSW NCCA Quaternary Geology mapping indicates the site is underlain by Pleistocene aged bedrock-mantling dune comprising marine sand and indurated sand which is indicated to have low pyrite, organic and carbonate content and low to moderate heavy mineral content, no shell.
Acid sulfate soils	Reference to NSW Acid Sulfate Soil risk mapping indicates the site is outside of the mapped area of acid sulfate risk. The nearest mapped area is approximately 110 m to the east which is mapped as low probability of occurrence (greater than 3 m below ground surface). Typically, acid sulfate soils occur in coastal areas at elevations of RL 5 and lower.
Surface water and Groundwater	The regional groundwater regime is generally expected to flow to the north/north east towards Nelson Bay which is approximately 250 m from the site. Nelson Bay is considered to be the nearest sensitive receptor. Groundwater is expected to flow similarly to surface topology i.e. flowing under the site to the east/north east. Search of NSW registered groundwater bores indicates the following nearby registered groundwater bores within 500 m of the site (information sourced from groundwater work summary for each bore): • GW200584 – 275 m north-east – installed in 2007 – no purpose listed on the work summary; • GW080159 – 325 m north-east – 10 m deep well installed in 2001 – monitoring purposes – standing water level of 0.48 m in sands; and • GW200402 – 375 m east – 24 m deep well installed in 2001 – monitoring purposes – standing water level of 6.40 m in sands. It should be noted that groundwater levels are affected by factors such as climatic conditions and soil permeability and therefore vary with time.

6. Geotechnical Investigation (Douglas, 2024)

Douglas has completed a geotechnical investigation concurrent to this PSI. The geotechnical investigation included five cone penetration tests (CPTs) to a depth of between 14.3 m and 20.0 m. Details of the results of the CPT are included in the geotechnical investigation report (227295.00.R.002.Rev0) with subsurface conditions inferred in the CPTs summarised below:

- Fill: Inferred to in all CPTs to depths between 0.15 m and 0.55 m;
- Sand / Silty Sand: inferred in all CPTs below the fill to the termination of the CPTs at 20 m depth. CPT 4 was terminated at 14.3 m due to excessive rod bending. The silty sand / sand was generally inferred in a medium dense or denser condition, initially inferred to be loose in CPTs 4 and 5 to 1.9 m and 1.7 m, respectively. Loose silty sand inferred in CPT 4 from 6.15 m to 7.35 m and 11.0 m to 12.15 m depth. Loose to medium dense silty sand inferred in CPT 1 between 12.8 m and 13.6 m depth and 9.1 m to 11.0 m in CPT 4.

No free groundwater was observed in the upper 10 m of the CPT voids following removal of rods (limit of measurement). It should be noted that groundwater levels are affected by climatic conditions and soil permeability and will therefore vary with time.

7. Site history

7.1 Historical aerial photography

Several historical aerial photographs were obtained from public databases. Extracts of the aerial photographs and detailed review is included in Appendix C. The earliest obtainable aerial photograph was 1963 however this aerial is low quality. A summary of key features observed for the site and surrounding land is as follows:

On site

- 1963 aerial appears to indicate four structures in each corner of the site (probably residential dwellings). It is noted that this aerial is low quality;
- Residential dwelling and garage in the western portion of Lot 15 was present in 1976 aerial. The dwelling and garage was present on 2024 aerial;
- Structure in the eastern portion of Lot 15 was demolished between 1976 and 1993. This area is now vacant;
- Small structure present in the central area of Lot 15 from at least 2007 (site shed or outhouse toilet);
- Residential dwelling in Lot B was demolished between 1993 and 2007 and developed into a commercial building. This commercial building is present on 2024 aerial;
- Residential dwelling in Lot A was demolished between 2015 and 2019. This area is now vacant;
- Exposed soils in Lot A and Lot 15 of the site appear disturbed/patchy intermittently in aerials between 2015 to 2024, which may indicate the presence of filling.

Off site

- Surrounding properties appear to have been residential/commercial properties since around 1963;
- Residential dwelling to the east was demolished between 1963 and 1993, and was developed into a commercial development;
- Development at surrounding properties appear to be generally limited to residential/commercial developments.

7.2 Historical street level photography

Several historical street level photographs were obtained from Google Street View. Street level photography was generally consistent with historical aerial photographs. The following additional information was obtained from historical street level photographs:

Lot A DP 417172

Available street level photography from Google Street View indicates the site was developed with a residential dwelling, likely external laundry and a shed in 2008 (see Figure 2 to Figure 3). There appears to be a barbecue or incinerator in the eastern area of the lot. The photographs indicate the shed on the southern boundary was demolished between 2010 and 2017 and the residential dwelling and laundry was demolished between 2018 and 2019.



Figure 2: 2010 street level photography, Lot A DP 417172, looking north (photograph sourced from Google Street View).



Figure 3: 2018 street level photography, Lot A DP 417172, looking east (photograph sourced from Google Street View).

Lot B DP 417172

The photographs indicate the building labelled as “Hunter District Ambulance” in 2008 and 2010 photographs (see Figure 4). The lot appeared to be used as ambulance despatch, vehicle storage/maintenance and offices. On the 2017 to 2021 photographs the building appears to be a hairdresser (see Figure 5). The building shape appears to be unchanged between 2008 photograph and 2021 photograph.



Figure 4: 2010 street level photography, Lot B DP 417172 (photograph sourced from Google Street View).



Figure 5: 2017 street level photography, Lot B DP 417172 (photograph sourced from Google Street View).

7.3 Title deeds

A historical title deeds search was used to obtain ownership and occupancy information including company names and the occupations of individuals. The title information can assist in the identification of previous land uses by the company names or the site owners and can, therefore, assist in establishing whether there were potentially contaminating activities occurring at the site. The results of the title deed search are provided in Appendix C. A summary of the title deeds and possible land uses (with reference to the aerial photographs and other historical searches) is presented below.

Lot A DP 417172

Historical title deeds indicate that the lot was used for residential use from 1921 to 2024. The lot was originally part of Lot 14 DP 5616 (formed in 1909) which was subdivided in 1960 into Lots A and B.

Lot B DP 417172

Historical title deeds indicate that the lot was used for residential use from 1921 to 1963, from 1963 to 2011 the lot was used as an ambulance depot. From 2011 to 2024 the lot was used as a for commercial purposes (now hairdresser). The lot was originally Lot 14 DP 5616 (formed in 1909) which was subdivided in 1960 into Lots A and B. Leases were identified for the Lot in 2013 and 2018 with a transfer of lease in 2019.

Lot 15 DP 5616

Historical title deeds indicate that the lot was used for residential use from 1921 to 2024.

7.4 Public registers and planning records

EPA Notices available under Section 58 of the Contaminated Land Management Act (CLM Act) Database searched 4 July 2024	The site and adjacent sites were not listed as a notified contaminated site. Search of the database yielded no records for Nelson Bay.
Sites notified to EPA under Section 60 of the CLM Act Database searched 4 July 2024	The site or adjacent properties were not listed as notified contaminated sites. The nearest notified contaminated sites are as follows: 25 Stockton Street, Nelson Bay (200 m east) - Shell Coles Express Service Station - contamination formerly regulated under the CLM Act. 38 Stockton Street, Nelson Bay (225 m south-east) – former Caltex service station - contamination formerly regulated under the CLM Act. The nearest notified contaminated sites are downgradient of the subject site and are therefore considered to pose a low risk of contamination to the subject site.

Licences listed under Section 308 of the Protection of the Environment Operations Act 1997 (POEO Act) Database searched 4 July 2024	There were no records issued to the site or adjacent properties. The nearest licenses are as follows: - License 11213 - 6 Teramby Road, Nelson Bay (300 m north - downgradient) – D’Albora Marinas Nelson Bay – boat construction/maintenance (general) and boat mooring and storage. - License 21810 – 1 Yaccaba Street, Nelson Bay (300 m south east – across gradient/possibly upgradient) - contaminated groundwater treatment (former fire station) – contaminants monitored included: metals, polycyclic and aromatic hydrocarbons (PAH), benzene/toluene/ethylbenzene/xylene (BTEX), oil/grease and per- and polyfluoroalkyl substances (PFAS). The nearest licensed activities are downgradient/across gradient and therefore the risk of contamination migration onto the site from these properties is generally considered to be low.
PFAS Investigation Sites listed on the EPA website Database searched 4 July 2024	The site and surrounding properties are not listed or adjacent to a site listed under: - NSW EPA PFAS Investigation Program; - Defence PFAS Investigation Program; - Defence PFAS Management Program; - Airservices Australia National PFAS Management Program. The nearest listed PFAS investigation site is Salt Ash weapons range approximately 20 km west of the site.
Planning Certificate(s) Certificate dated 4 July 2024	Section 10.7 (2&5) certificates were obtained for Lot A, B DP 417172 and 15 DP 5616. Pertinent details include: - The lots are not listed on the loose fill asbestos register; - The lots are not within a mine subsidence district; and - There are no matters prescribed by Section 59(2) of the CLM Act 1997 to be disclosed.
Council Records Database searched 4 July 2024	There was one record available on PSC development application tracker. The development application was submitted for Lot B in 417172 for change of use to hair dressing salon.
Safe Work NSW Search Dated 24 July 2024	SafeWork NSW search was undertaken for Lot B DP 417172. SafeWork NSW indicated they hold no records of hazardous chemicals (Schedule 11) on this lot.

7.5 Site history integrity assessment

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

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

7.6 Summary of site history

Lot A DP 417172

Based on the available information the lot appears to have been used for residential purposes from around 1921 until around 2018. Between 2018 and 2019 the residential dwelling was demolished and has remained vacant until 2024.

Lot B DP 417172

Based on the available information the lot appears to have been used for residential purposes from around 1921. From around 1963 the lot was acquired by New South Wales Ambulance Transport Service Board Newcastle District and developed into an ambulance depot. The lot was used as an ambulance depot until around 2011. Since 2011 the lot has been used for commercial purposes (now hairdresser).

Lot 15 DP 5616

Based on the available information the lot appears to have been used for residential purposes from around 1921. Lot layout appeared in the 1960s aerial to comprise a residential dwelling in the western area of the lot, a structure in the eastern area of the lot, garage in the north-western area of the lot and an outhouse/shed in the central area of the lot. The structure in the north-eastern area of the site was demolished between 1963 and 1993. The residential dwelling exists on site to date (possibly original residential building).

8. Site walkover

A site walkover was undertaken by an engineer from Douglas on 5 July 2024. The general site topography was consistent with that described in the environmental setting. The site layout appears to have remained unchanged from the 2024 aerial photograph. The following key site features pertinent to the PSI were observed (refer to photographs in Appendix D). The site is bounded by a residential dwelling to the north, commercial developments (restaurant, shops, carparking) to the east, by Donald Street, vacant lot/commercial lot to the south and Church Street and school to the west (Photo 1 to Photo 5)

5 Church Street (Lot 15 DP 5616)

- Residential dwelling in the north western area of the site (concrete/brick footings supporting a wooden floor, brick and plastic cladding walls and a corrugated fibre cement (fibro) roof sheeting (potentially asbestos containing material (PACM)) (Photo 6). Subfloor contains stockpiles of materials e.g. timber, metal fencing, brick, PACM pipe/fragments and wrapped up fibre cement sheeting (Photo 7 to Photo 8);

- Garage adjacent to the northern side of the above-mentioned dwelling (concrete floor, timber framed, fibre cement sheet walls, fibre cement awnings and a corrugated fibre cement sheet roof) (Photo 9). The concrete floor was generally in good condition and contained no obvious staining. Contents of the garage included recycling bins and residential items e.g. tools, bench and toys (Photo 10);
- Smaller building to the east of the residential dwelling (likely former outhouse toilet) in the central area of the site (concrete floor, concrete wall, fibre cement blinds and a corrugated fibre cement roof (PACM) (Photo 11). The building was empty.
- North eastern area of the site (backyard of residential dwelling) was generally grassed (Photo 12), mounded/hummocky in places and sloping to the south east. Fibre cement sheeting fragments in addition to other demolition materials (ie tile, glass and concrete fragments) were observed at the surface, possibly associated with the demolition of former buildings/fences (Photo 13); and
- Fibre cement sheeting observed below fence between 5 Church Street and 7 Church Street (possible former fence) (Photo 14).

7 Church Street (Lot A DP 417172)

- Majority of the lot is cleared, sloping to the south east, hummocky in parts with grass covering the majority of the lot with the exception of some bushes and trees in the south western corner (Photo 15 and Photo 16);
- Fibro fragments were observed at the surface across the area, possibly associated with demolition of former dwelling/structures (Photo 17); and
- Filling observed in the south western area of the site, associated with former garden shed/garage (Photo 18).

42 Donald Street (Lot B DP 417172)

- Commercial building in the south eastern area of the site (concrete floor, brick walls, fibre cement sheeting awnings and metal roof) (Photo 19). The building was currently used as a hairdresser (ground floor) and residential units (first floor);
- Concrete slab area to the immediate south of the commercial building is currently used for car parking (Photo 20). There were marking/cuts in the western portion of the parking area (Photo 21), a pit in the central portion of the parking area (possible former sump) (Photo 22) and a concrete patch in the central portion of the parking area which reads “no more petrol 2007” (Photo 23). Noting the former land use as an ambulance depot (1960s to 2010s), along with the inspection of this area, indicates a possibility of a former underground storage tank (UST) for fuel in the south eastern area of the site;
- Filling observed along the northern side of the commercial building (Photo 24)
- Fibre cement sheeting fragments were observed to the west of the commercial building, possibly associated with the fibre cement sheeting awnings of the commercial building (Photo 25);
- Fibre cement sheeting fragments were also observed in surface fill to the south west of the commercial building, adjacent to bins (Photo 26); and
- Fibre cement sheet fragments buried below fence between 7 Church Street and 42 Donald Street (Photo 27).

In conjunction with site walkover, Douglas also sampled material fragments across the site. The location of the material fragments collected are shown on Drawing 1 Appendix A with a summary of fragments collected shown in Table 1.

Table 1: Summary of material fragments collected

Sample	Description	Inferred source
F1	Grey, flat	Garage wall
F2	Grey, flat	Garage awning
F3	Grey, curved	Asbestos pipe
F4	Grey, flat, dimples	Unknown
F5	Grey, curved, dimples	Roof of dwelling
F6	Grey, curved, dimples	Roof of dwelling
F7	Grey, curved, dimples	Roof of concrete outhouse
F7A	Grey, flat, dimples	Shutters of concrete outhouse
F8	Grey, flat, dimples	Former structure
F9	Grey, flat, dimples	Former structure
F10	Grey, curved	Unknown, possible former fence
F11	Grey, flat	Unknown, possibly from demolition of former dwelling/outhouse (likely laundry)
F12	Grey, soft, matted material	Unknown, possibly from demolition of former dwelling
F13	Grey, flat	Unknown, possibly from demolition of former dwelling
F14	Grey, flat	Unknown, possibly from demolition of former dwelling
F15	Pale grey, flat	Unknown
F16	Pale grey, flat	Awning of commercial development
F17	Yellow, flat	Unknown
F18	Grey, flat, dimples	Unknown

9. Preliminary conceptual site model

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

Based on the current investigation, the following potential sources of contamination and associated contaminants of potential concern (CoPC) have been identified and summarised in Table 2.

Table 2: Summary of potential sources

Potential sources and associated CoPC
On site sources
S1: Existing buildings CoPC include asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB. S2: Demolition of former structures): associated with the demolition of former buildings / sheds / fences and landscaped areas/garden beds and associated remnant fill. CoPC include asbestos, synthetic mineral fibres (SMF), heavy metals and PCB. S3: Fill (unknown source): associated with landscaping, retaining wall backfill, bedding material for services and concrete slabs etc. CoPC include metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), organophosphorus pesticides (OPP) phenols, asbestos and per- and polyfluoroalkyl substances (PFAS) subject to the source. S4: Former/current underground storage tank/s (UST): including associated infrastructure (i.e. bowser, fuel and vent pipes), associated with former ambulance depot. CoPC to include lead, TRH, BTEX, PAH, phenols and volatile organic compounds (VOC). S5: Spills and leaks: from parked vehicles and or vehicle maintenance CoPC include metals TRH, BTEX, PAH and phenols S6: Maintenance of landscaped areas CoPC include metals, TRH, OCP and OPP S7: Former Incinerator: including possible ash disposal CoPC include metals, TRH, PAH, dioxins and furans
Off site sources
S8: Former Nelson Bay Fire Station (13 Yacaaba Street Nelson Bay): across gradient (likely low risk but off-site migration confirmed based on experience on other projects downgradient of the property). CoPC include PFAS

The following potential human and environmental receptors, along with relevant potential pathways, have been identified and summarised in Table 5.

Table 3: Summary of potential receptors and pathways

Potential human receptors
HR1: Current users: residential and commercial HR2: Construction and maintenance workers HR3: End users: residential HR4: Adjacent site users: residential and commercial
Potential environmental receptors
ER1: Surface water: Nelson Bay (marine) ER2: Groundwater ER3: Terrestrial ecosystems
Potential pathways to human receptors
HP1: Ingestion and dermal contact HP2: Inhalation of dust and/or vapours
Potential pathways to environmental receptors
EP1: Surface water run-off EP2: Leaching of contaminants and vertical migration into groundwater EP3: Lateral migration of groundwater providing base flow to water bodies EP4: Inhalation, ingestion and absorption

Summary of potentially complete exposure pathways

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S5) and receptors are provided in below Table 4.

Table 4: Summary of potentially complete exposure pathways

Source	Exposure pathway	Receptor	Risk management action
S1: Existing buildings CoPC: asbestos, SMF, lead, PCB S2: Demolition of former structures CoPC: asbestos, SMF, metals, PCB. S3: Fill CoPC metals, TRH, BTEX, PAH, PCB, OCP, OPP, phenols, asbestos and PFAS.	HP1: Ingestion and dermal contact	HR1: Current users (residential/commercial)	An intrusive investigation is recommended to assess possible contamination including testing of the soils.
	HP2: Inhalation of dust and/or vapours	HR2: Construction and maintenance workers	
	HP2: Inhalation of dust and/or vapours	HR3: End users (residential)	
	EP1: Surface water run-off EP3: Lateral migration of groundwater providing base flow to water bodies	HR4: Adjacent site users (residential/commercial)	
		ER1: Surface water	

Source	Exposure pathway	Receptor	Risk management action
S5: Spills/leaks CoPC: metals, TRH, BTEX, PAH, phenols S6: Maintenance of landscaped areas CoPC: metals, TRH, OCP, OPP S7: Incinerator CoPC metals, TRH, PAH, dioxins, furans	EP2: Leaching of contaminants and vertical migration into groundwater	ER2: Groundwater	
	EP4: Inhalation, ingestion and absorption	ER3: Terrestrial ecosystems	
S4: Former/current USTs CoPC: lead, TRH, BTEX, PAH, phenols, VOC	HP1: Ingestion and dermal contact HP2: Inhalation of dust and/or vapours	HR1: Current users (residential/commercial) HR2: Construction and maintenance workers HR3: End users (residential) HR4: Adjacent site users (residential/commercial)	An intrusive investigation is recommended to assess possible contamination and potential migration from the underground fuel infrastructure on site. An initial soil vapour assessment would be recommended, followed by soil and groundwater sampling where required.
	EP1: Surface water run-off EP3: Lateral migration of groundwater providing base flow to water bodies	ER1: Surface water	
	EP2: Leaching of contaminants and vertical migration into groundwater	ER2: Groundwater	
	EP4: Inhalation, ingestion and absorption	ER3: Terrestrial ecosystems	
S8: Former Nelson Bay Fire Station CoPC: PFAS	HP1: Ingestion and dermal contact HP2: Inhalation of dust and/or vapours	HR1: Current users (residential/commercial) HR2: Construction and maintenance workers HR3: End users (residential)	An intrusive investigation is recommended to assess possible PFAS impacts from potential contaminant migration from the Fire Station.
	EP1: Surface water run-on EP3: Lateral migration of groundwater onto the site	ER1: Surface water	
	EP2: Leaching of contaminants and vertical migration into groundwater	ER2: Groundwater	
	EP4: Inhalation, ingestion and absorption	ER3: Terrestrial ecosystems	

10. Sampling and Analysis Quality Plan

10.1 Data quality objectives

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

10.2 Soil sampling rationale

The soil sampling strategy was opportunistic soil sampling from geotechnical boreholes. This involved sampling from a total of five locations in drilling rig accessible areas of the site. Due to access restraints a borehole location could not be positioned at 42 Donald Street. Borehole locations are shown on Drawing 1, in Appendix A.

Table 2 of NSW EPA (2022) recommends a minimum of 9 systematic sampling points for a site up to 0.3 ha for site characterisation based on the detection of circular hot spots using a systemic grid sampling pattern, plus additional targeted sampling for potential point sources of contamination (ie USTs).

Soil samples for contamination testing purposes were collected from the geotechnical investigation boreholes at depths of approximately 0.1 m, 0.5 m, 1.0 m and every 1.0 m thereafter, and changes in lithology or signs of contamination.

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

11. Site assessment criteria

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

The investigation and screening levels applied in the current investigation comprise levels adopted for a generic residential land use scenario. The derivation of the SAC is included in Appendix G.

12. Results

12.1 Field work results

The borehole logs for this assessment are included in Appendix H. The logs recorded the following general sub-surface units:

Unit 1.1 – Fill (no building demolition waste): generally comprising brown silty sand with rootlets.

Unit 1.2 – Fill (with building demolition waste): generally comprising brown silty sand with brick, tile, glass and rootlets.

Unit 2 – Sand: pale brown sand. Occasionally dark brown silty sand (indurated sand) was encountered.

Subsurface summary of units encountered at each borehole location is shown in Table 5.

Table 5: Summary of subsurface units encountered

Unit	6	7	8	9	10
1.1	0 - 0.1	-	0 - 0.1	-	-
1.2	-	0 - 0.1	-	0 - 0.6	0 - 0.1
2	0.1 – 6.0*	0.1 – 6.0*	0.1 – 6.0*	0.6 – 6.0*	0.1 – 6.0*

Notes to table:

* Limit of investigation

Shaded cells indicate subsurface units with potential contaminant observations (presence of building materials which are indicative of the presence of hazardous building materials)

No visual or olfactory evidence (e.g. staining, odours, free phase product) was observed during the investigation to suggest the presence of significant contamination within the soils at the geotechnical investigation test locations.

The PID screening recorded values of less than 1 ppm suggesting the absence, or very low concentrations, of VOC in the samples tested.

No free groundwater was observed during drilling of boreholes. It should be noted that groundwater levels are affected by climatic conditions and soil permeability and will therefore vary with time.

12.2 Asbestos field screening and material fragment testing

Field screening / sieving of bulk soil samples (10 L) was conducted on selected fill samples to screen for the presence of ACM with reference to the relevant guidelines. A total of five fill samples were screened / sieved.

Potential ACM (PACM) fragments was encountered in one of the five bulk samples and were submitted for laboratory asbestos identification.

During the site walkover, 19 PACM fragments were observed (see Section 8 for descriptions). Eight PACM fragments were submitted for laboratory asbestos identification.

Laboratory testing confirmed the presence of asbestos in eight of the nine material samples with fragments confirmed to be ACM from the following samples:

Table 6: Summary of asbestos identification

Sample	Location	Asbestos identification
F1	Wall material from garage, north-western area of the site.	Present (chrysotile, amosite, crocidolite)
F5	Roof material from residential dwelling, north-western area of the site.	Present (chrysotile, amosite)
F8	Within surface fill, north-eastern area of the site.	Present (chrysotile)
F12	Within surface fill, south-western area of the site (possibly from demolition of former building/structures).	No asbestos detected
F16	Awning material from commercial building, south-eastern area of the site.	No asbestos detected
F17	Within surface fill, adjacent to bins, south-eastern area of the site.	Present (chrysotile, amosite, crocidolite)
9/0-0.6/F1	Bore 9 / 0 – 0.6m.	Present (chrysotile, amosite, crocidolite)
9/0-0.6/F2	Bore 9 / 0 – 0.6m.	Present (chrysotile, amosite, crocidolite)

The field screening results were used to estimate the concentration of ACM in fill. An exceedance criterion of 0.01% w/w was adopted as recommended in WA DoH (2021) and the NEPM (NEPC, 2013) for standard residential land use. (refer to the SAC in Appendix G).

Calculations were made on bulk fill samples that contained asbestos fragments using the following equation:

$$\text{asbestos content in soil} = \frac{\% \text{ asbestos content} * \text{ACM(kg)}}{\text{soil mass (kg)}}$$

Asbestos calculations were made based on estimates of 15% asbestos content with reference to the NEPM (NEPC, 2013) for fibre cement materials. The results of field screening are presented in the following table in Appendix I:

- Table I1 – Summary of asbestos field screening

12.3 Laboratory analytical results

The laboratory testing was undertaken by Envirolab Services Pty Ltd, a NATA accredited laboratory. Analytical methods used are shown in the laboratory sheets in Appendix I.

The results of laboratory analysis are summarised in the following tables in Appendix I:

- Table I2 – Summary of laboratory results – Land use
- Table I3 - Summary of laboratory Results – Waste classification

The laboratory certificate of analysis together with the chain of custody and sample receipt information is provided in Appendix I.

13. Discussion

13.1 Land use

A preliminary land use assessment was undertaken utilising laboratory results obtained from samples collected from geotechnical investigation bores. The tested soil samples were within the SAC with the exception of:

- Zinc – samples 10/0-0.1 m and D1/JCL (replicate sample of 10/0-0.1m) which marginally exceeded EIL-A of 170 mg/kg. These exceedances are less than 2.5 times the SAC and are therefore not considered a hotspot as per (NEPC, 2013). The zinc concentrations detected are not considered to be significant for the following reasons:
 - o The proposed development will cover the majority of the site with a new building, soils at the site are not considered to be ecologically significant;
 - o Significant cut/fill is anticipated to achieve design finish levels;
 - o Landscape areas (if any) are likely to incorporate imported fill materials within near surface soils.
- Asbestos (bonded) – surface fragments F1, F5, F8, F17 and in fill at 9/0-0.6/F1 and 9/0-0.6/F2, these fragments were in good condition. Furthermore, friable asbestos (FA) and asbestos fines (AF) was not detected in soil sample 9/0-0.1 m and 9/0.5 m (500ml asbestos identification test in the vicinity of surface ACM).

It is noted that concentrations of additional heavy metals, PAHs and OCPs (aldrin/dieldrin) were detected above laboratory reporting limits within the fill samples tested, however, concentrations were within the adopted SAC.

A summary of soil results that exceeded SAC and asbestos detections are shown in Table 7.

Table 7: Summary of soil results that exceed the site assessment criteria and asbestos detections

Analyte	SAC	No. of samples tested	No. of Exceedances
Asbestos identification - material fragment (bonded)	HSL A	8	6
Asbestos identification – 500ml sample (friable)	HSL A	6	1*

Notes to table:

* Asbestos was detected in 9/0.5 m asbestos identification (500ml) sample, however the asbestos detected was a fragment >7 mm and therefore not FA/AF.

13.2 Preliminary waste classification

The results of preliminary contamination testing from the geotechnical bores was compared to the NSW EPA waste classification guidelines (NSW EPA, 2014) to inform potential disposal options for soils tested.

Analytical testing of fill samples detected exceedances of the contaminant threshold (total contaminant concentrations) for general solid waste (GSW) CTI. CTI exceedances were recorded for lead.

Bonded ACM was also detected in material and soil samples selected for analysis. Asbestos is classified as Special Waste (NSW EPA, 2014) in addition to the chemical classification of the material.

The (NSW EPA, 2016) addendum for waste classification of PFAS, provides both total and leachable (TCLP) criteria for waste classification. Total PFAS concentrations were not detected above laboratory practical quantitation limits (PQL) therefore TCLP testing was not conducted on the soil samples to confirm leachable characteristics of PFAS in the soil.

As per the waste classification assessment criteria (NSW EPA, 2014), toxicity characteristic leaching procedure (TCLP) analysis was conducted on samples with recorded total contaminant exceedances (CTI) to determine the leachable characteristics of the material and confirm waste classification.

All TCLP results were below the TCLP1 thresholds and total concentrations were below SCL thresholds indicating that the fill tested would be classified as GSW (non-putrescible) (SCL/TCLP1) with asbestos (Special Waste) based on the testing conducted.

This waste classification is preliminary in nature. Further assessment of the waste classification of site soils would be required to confirm off-site disposal and/or re-use opportunities with reference to sampling design guidelines (NSW EPA, 2022), waste classification guidelines (NSW EPA, 2014) and appropriate resource recovery orders and exemptions (where applicable).

13.3 Data quality assurance and quality control

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

14. Conceptual site model

The preliminary data collected for this PSI has generally confirmed that certain potential contaminant sources outlined in the preliminary CSM outlined pose a potentially complete pathway to the identified receptor(s). No additional sources of contamination have been identified as a result of the preliminary testing results and therefore revision of the CSM is not warranted at this stage (ie further investigation required). The CSM is provided in Table 4.

15. Conclusions and Recommendations

15.1 Key Findings

The limited soil testing completed to date indicated that concentrations of the primary target CoPC in the soils tested from the geotechnical bores are within NEPC (2013) criteria for residential land use with the exception of the identified asbestos impacts which were generally observed within near surface soils/fill across the majority of grassed areas of the site and likely to be associated with current/former site structures. The extent of asbestos impact has not been delineated.

Additional subsurface investigation is required, however, to assess all areas of the site (including subsurface conditions in Lot B), the identified contaminant sources and identified data gaps (refer Section 15.3) to inform contaminant status and suitability of the site for the proposed development.

The soils tested to date would be preliminarily classified as GSW (non-putrescible) (SCC1/TCLP1) with asbestos (Special Waste) based on the testing conducted. This preliminary classification is not to be used for waste disposal. Further work is required to confirm off-site disposal and/or re-use opportunities with reference to sampling design guidelines (NSW EPA, 2022), waste classification guidelines (NSW EPA, 2014) and appropriate resource recovery orders and exemptions (where applicable).

15.2 Remediation Requirements

Remediation or on-site management of the site will be required to address the identified asbestos impacts in soil/fill at the site and any additional contamination identified during the additional investigations (required to confirm the contamination status of the site), in order to render the site suitable for the proposed residential development.

The proposed remediation strategy, remediation action criteria (RAC) and validation requirements will need to be outlined in a site-specific remediation action plan (RAP) and should be integrated with the proposed development.

15.3 Data Gaps

Based on the preliminary assessment conducted to date there remains some major data gaps with regard to the contamination assessment as follows:

- Subsurface investigation in the south eastern area of the site (currently hairdresser) has not been undertaken. Site history information to date indicates the likely presence of a former or abandoned UST in this location. Additional investigation beneath pavements/buildings should include assessment of potential residual hydrocarbon impacts and potential soil vapour risks from former/abandoned USTs, in addition to the assessment of the other identified contaminant sources for this lot including fill and demolition wastes from former structures. Additional investigation could include a preliminary soil vapour assessment prior to demolition and additional boreholes/test pits prior to and following demolition of the building;

- Subsurface investigation across the remainder of the site has been limited to sampling from geotechnical investigation boreholes which have not necessarily targeted the identified sources of contamination. The sampling density conducted to date does not meet the minimum sampling design recommended by NSW EPA for the site area. Additional investigation is therefore required to confirm site conditions, contamination status and site suitability.
- Preliminary waste classification testing has been completed however waste classification of soils, particularly beneath existing site structures is currently unknown. Additional site investigation after demolition would be required to meet sampling design guidelines (NSW EPA, 2022) and to possibly delineate asbestos impacts to reduce cost associated with handling and disposal of asbestos impacted soils; and
- Natural soils at the site may be able to be classified as virgin excavated natural material (VENM) or excavated natural material (ENM) subject to the results of additional sampling and testing to confirm contaminant concentration. At this stage, chemical testing on natural soils has been limited to analysis of two samples for PFAS only. For natural soils at the site to be classified as VENM or ENM, additional investigation would be required including chemical testing conducted at the sampling densities stipulated by *The excavated natural material order 2014* (NSW EPA, 2014), where an ENM status is sought.

15.4 Recommendations

The following recommendations are made:

- A detailed site investigation for contamination (DSI) will be required to further assess the contamination status of the site and inform remediation requirements and options for the proposed development. The DSI should include the following:
 - o Ground Penetrating Radar (GPR) survey of accessible areas of Lot B to inform the possible location of USTs and associated infrastructure;
 - o Preliminary soil vapour assessment in the vicinity of the former/abandoned UST/s and associated infrastructure to provide preliminary information regarding the potential for volatile hydrocarbon impact beneath the existing building/pavements;
 - o The drilling of test bores in the vicinity/downgradient of the underground fuel infrastructure and installation of groundwater monitoring wells;
 - o Subsurface investigation in accessible areas of the site to assess the extent of identified asbestos contamination at the site, assess other sources of potential contamination to inform remediation requirements and likely waste classification of soils required to be removed from the site; and
- Preparation of a site specific RAP.

16. References

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

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

NSW EPA. (2014). *Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014, The excavated natural material order 2014*. NSW Environment Protection Authority.

NSW EPA. (2014). *Waste Classification Guidelines, Part 1: Classifying Waste*. NSW Environment Protection Authority.

NSW EPA. (2016). *Addendum to the Waste Classification Guidelines (2014) - Part 1: Classifying Waste*. NSW Environment Protection Authority.

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

NSW EPA. (2022). *Sampling Design, Part 1: Application; Part 2: Interpretation*. NSW Environment Protection Authority.

17. Limitations

Douglas Partners Pty Ltd (Douglas) has prepared this report for this project at 5-7 Church & 42 Donald Street, Nelson Bay NSW with reference to Douglas' proposal 227295.00.P.001.Rev2 dated 26 June 2024 and acceptance received from Roberto Giammaria of Fortezza Group Pty Ltd dated 3 July 2024. The work was carried out under Douglas' Engagement Terms. This report is provided for the exclusive use of Fortezza Group Pty Ltd for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Douglas, does so entirely at its own risk and without recourse to Douglas for any loss or damage. In preparing this report Douglas has necessarily relied upon information provided by the client and/or their agents.

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

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

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

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

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

Asbestos has been detected by observation or by laboratory analysis, either on the surface of the site, or in fill materials at the test locations sampled and analysed. Additionally, building demolition materials, such as concrete, brick, tile was located in previous below-ground fill and these are considered as indicative of the possible presence of hazardous building materials (HBM), including asbestos.

Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. This is either due to undetected variations in ground conditions or to budget constraints (as discussed above), or to parts of the site being inaccessible and not available for inspection/sampling. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations, and hence no warranty can be given that asbestos is not present.

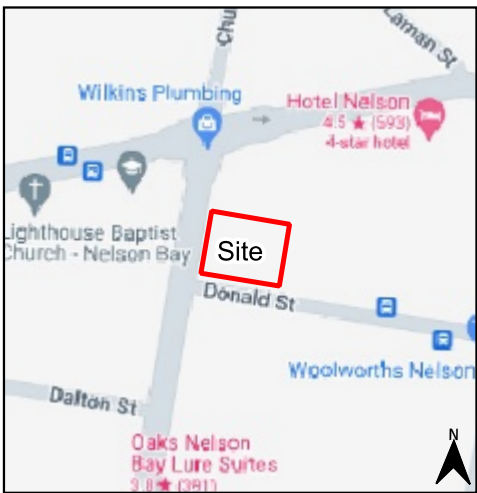
Part 5.6, Section 143 of The Protection of the Environment Operations Act 1997 states that it is an offence for waste to be transported to a place that cannot lawfully be used as a facility to accept that waste. It is the duty of the owner and transporter of the waste to ensure that the waste is disposed of appropriately. Douglas does not accept liability for the unlawful transport or disposal of materials from any site. Douglas accepts no responsibility for tracking, loading, management, transport or disposal of the materials from the site.

Appendix A

Drawing 1 – Test location plan

Drawing 2 – Site features and photograph locations

Proposed development drawings (Hayes Anderson
Lynch Architects Pty Ltd drawings SD101 to SD312
revision Q dated 05/06/2024)



Site Location

Legend

Approximate site boundary

Approximate borehole location

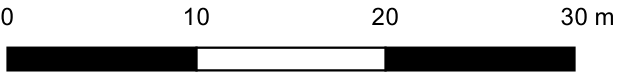
Approximate CPT location

Approximate material fragment locations

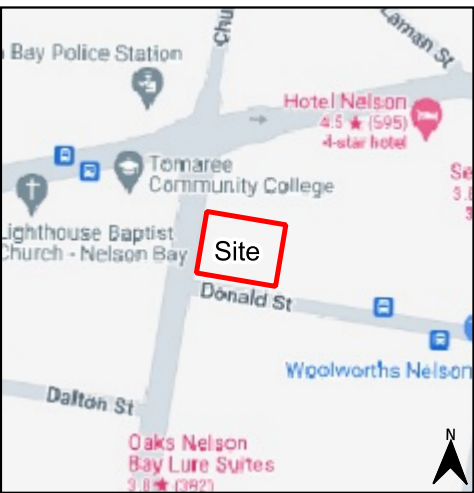
NOTE:

1. Drawing adapted from aerial imagery from Metromap dated 30 May 2024.

2. Test locations are approximate only and were located using differential GPS typically accurate to ± 0.1 m depending on satellite coverage.



	CLIENT: Fortezza Group Pty Ltd		TITLE: Test location plan Proposed residential development 5-7 Church & 42 Donald Street, Nelson Bay NSW		Project: 227295.00
	OFFICE: Newcastle	DRAWN BY: JCL			DRAWING No: R.001.D.001
	SCALE: 1:400 @A3	DATE: 26.July.2024			REVISION: 0



Site Location

Legend

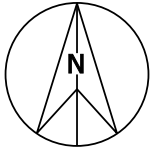
- Approximate lot boundary
- Approximate site boundary
- NSW 2 m ground surface contour
- Site features
- Photo location and direction
- Current and former building footprints
- Approximate material fragment locations
- Approximate fuel infrastructure location

NOTE:
1. Drawing adapted from aerial imagery from Metromap dated 30 May 2024.
2. Test locations are approximate only and were located using differential GPS typically accurate to ± 0.1 m depending on satellite coverage.



CLIENT:	Fortezza Group Pty Ltd
OFFICE:	Newcastle
DRAWN BY:	JCL
SCALE:	1:400 @A3
DATE:	01.August.2024

TITLE: **Site features and photograph locations**
Proposed residential development
5-7 Church & 42 Donald Street, Nelson Bay NSW



Project:	227295.00
DRAWING No:	R.001.D.002
REVISION:	0

Sketch Design Drawings

The Belvedere



Massing Model

Sketch Design

forteazza

GROUP

THE BELVEDERE

Developed by Fortezza Group

forteazza.com.au

+61 (07) 3236 4188

admin@forteazza.com.au

PROPERTY COUNCIL of Australia

Australian Institute of Project Management

AUSTRALIAN BUILDING DEVELOPERS ASSOCIATION

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL

HAYES
ANDERSON
LYNCH

ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au

AI

A+

Member
Australian
Institute of
Architects

Project
The Belvedere
5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title
Coversheet

Scale @ A3	Drawn:	Checked:
1:1.25, 1:100SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD101	Q

Sketch Design Drawings

The Belvedere

KEY PROPOSAL STATISTICS - MULTIPLE DWELLING		DWELLING/ OFFICE/ RETAIL SUMMARY	
Site Area:	2,202 m ² (approx)	2 BED	33
Frontage:	94.55 m (approx)	3 BED	22
Number of Storeys:	09	OFFICE	1
Maximum Building Height :	29.7 m AHD (approx)	TOTAL	56
Car Spaces - Resident	76	GROSS FLOOR AREA	
Car Spaces - Visitor	18	TOTAL GFA	5,974.87 m ²
Common	315.58 (14%)	TOTAL FSR	2.7:1

Home Storey	App Number	Apartment Type	# Cars	Internal Area (m2)	POS (m2)
Ground					
	001	2 BED	1	93.90	152.22
	002	2 BED	1	83.07	74.73
	003	2 BED	1	83.07	74.73
	004	2 BED	1	93.90	126.65
	005	2 BED	1	84.62	167.71
	006	2 BED	1	84.61	185.26
	006	OFFICE	2	78.76	
Level 01					
	101	2 BED	1	93.90	17.42
	102	2 BED	1	83.07	16.05
	103	2 BED	1	83.07	16.05
	104	2 BED	1	83.07	16.05
	105	2 BED	1	83.07	16.05
	106	2 BED	1	93.90	17.42
	107	2 BED	1	84.62	48.19
	108	2 BED	1	79.04	26.40
	109	2 BED	1	84.61	47.38
Level 02					
	201	2 BED	1	93.90	17.42
	202	2 BED	1	83.07	16.05
	203	2 BED	1	83.07	16.05
	204	2 BED	1	83.07	16.05
	205	2 BED	1	83.07	16.05
	206	2 BED	1	93.90	17.42
	207	2 BED	1	84.62	48.19
	208	2 BED	1	79.04	26.40
	209	2 BED	1	84.61	47.38
Level 03					
	301	2 BED	1	93.90	17.42
	302	2 BED	1	83.07	16.05
	303	2 BED	1	83.07	16.05
	304	2 BED	1	83.07	16.05
	305	2 BED	1	83.07	16.05
	306	2 BED	1	93.90	17.42
	307	2 BED	1	84.62	48.19
	308	2 BED	1	79.04	26.40
	309	2 BED	1	84.61	47.38
Level 04					
	401	3 BED	2	124.33	17.42
	402	3 BED	2	120.80	28.29
	403	3 BED	2	120.80	28.29

Home Storey	App Number	Apartment Type	# Cars	Internal Area (m2)	POS (m2)
	404	3 BED	2	124.33	17.42
	405	3 BED	2	125.07	73.72
	406	3 BED	2	123.56	59.49
Level 05					
	501	3 BED	2	124.33	17.42
	502	3 BED	2	120.80	28.29
	503	3 BED	2	120.80	28.29
	504	3 BED	2	124.33	17.42
	505	3 BED	2	125.07	73.72
	506	3 BED	2	123.56	59.49
Level 06					
	601	3 BED	2	124.33	17.42
	602	3 BED	2	120.80	28.29
	603	3 BED	2	120.80	28.29
	604	3 BED	2	124.33	17.42
	605	3 BED	2	125.07	73.72
	606	3 BED	2	123.56	59.49
Level 07					
	701	3 BED	2	133.41	17.42
	702	3 BED	2	135.08	28.29
	703	3 BED	2	135.08	28.29
	704	3 BED	2	132.51	17.42
Level 08					
	701	3 BED	2	45.58	110.60
	702	3 BED	2	44.10	106.94
	703	3 BED	2	37.80	111.60
	704	3 BED	2	46.49	109.70
				5,833.70 m ²	2,648.48 m ²

GFA Schedule	
Home Story	Area (m2)
Ground	743.10
Level 01	768.35
Level 02	768.35
Level 03	768.35
Level 04	738.89
Level 05	738.89
Level 06	738.89
Level 07	536.08
Level 08	173.97
	5,974.87 m ²

GFA Including Apartment and office Internals, measured from the external face of external walls and centres of common walls - not including communal recreation



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia ####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL



ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project		
The Belvedere		
5-7 Church st, 42 Donald st , NSW 2315		
Drawing Title		
Development Matrix		
Scale @ A3	Drawn:	Checked:
1:1.25, 1:1.67SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD102	Q



 Context Plan



THE BELVEDERE

Developed by Fortezza Group

fortezza.com.au

+61 (07) 3236 4188

admin@fortezza.com.au



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked



HAYES
ANDERSON
LYNCH

ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3852 3190
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project		
The Belvedere		
5-7 Church st, 42 Donald st , NSW 2315		
Drawing Title		
Context Plan		
Scale @ A3	Drawn: SD	Checked: RH
Project Number	Drawing Number	Issue
H4700DON	SD201	Q



Sketch Design

fortezza
GROUP

THE BELVEDERE
Developed by Fortezza Group

fortezza.com.au
+61 (07) 3236 4188
admin@fortezza.com.au



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date Issue Details Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

Site Plan

Scale @ A3	Drawn:	Checked:
1:400	SD	RH
Project Number	Drawing Number	Issue
H4700DON	SD202	Q



200

Basement 02

1:250

Sketch Design



THE BELVEDERE

Developed by Fortezza Group

fortezza.com.au

+61 (07) 3236 4188

admin@fortezza.com.au



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia ####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date	Issue	Details	Checked
------	-------	---------	---------



ARCHITECTS

TOWN PLANNERS

INTERIOR DESIGNERS

3 / 709 MAIN STREET

KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0

E reception@halarchitects.com.au

W www.halarchitects.com.au



Project

The Belvedere

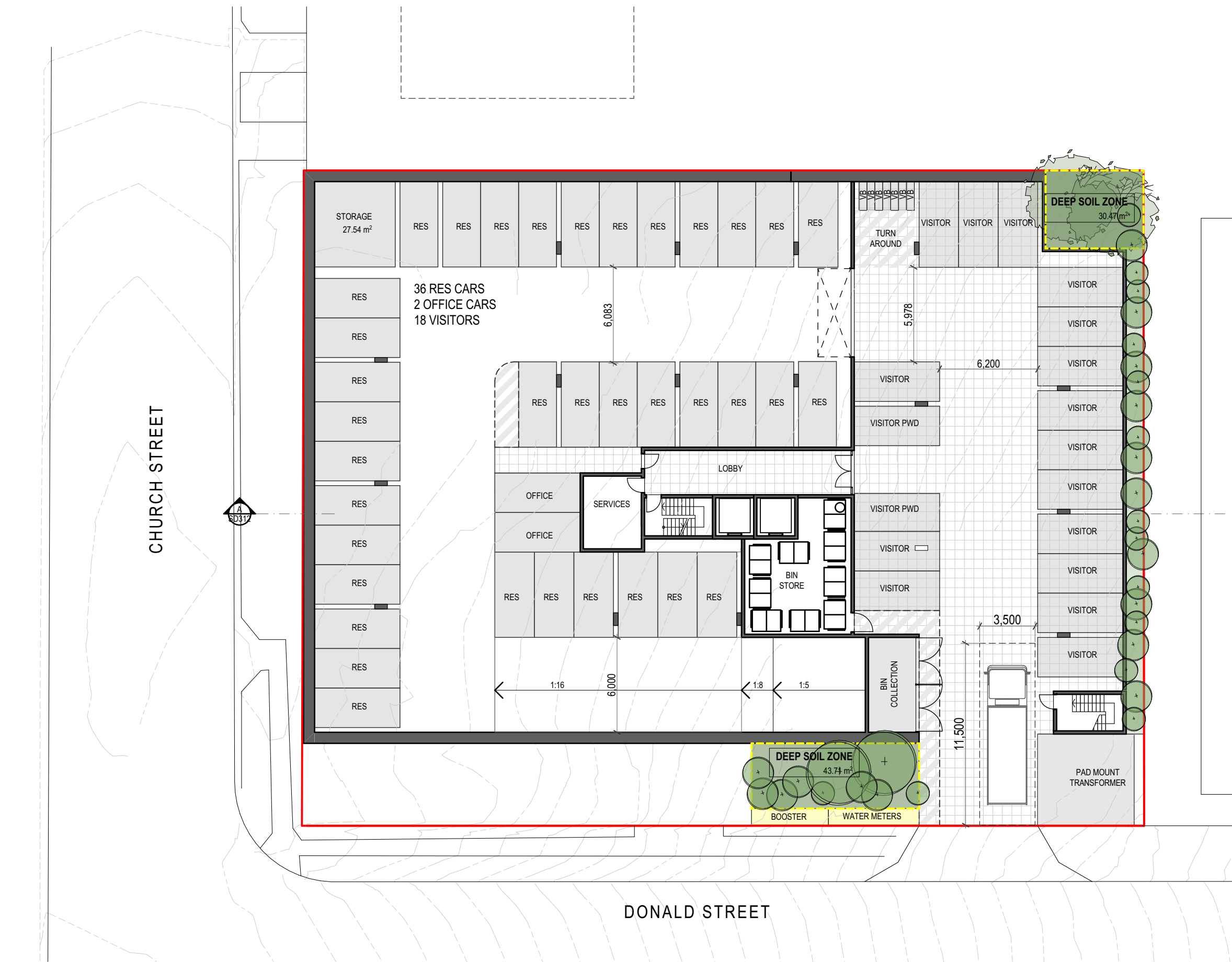
5-7 Church st, 42 Donald st ,

NSW 2315

Drawing Title

GA Plan - Basement 02

Scale @ A3	Drawn:	Checked:
1:250	SD	RH
Project Number	Drawing Number	Issue
H4700DON	SD301	Q



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####. Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date Issue Details Checked



forteazza

GROUP

THE BELVEDERE

Developed by Fortezza Group

forteazza.com.au

+61 (07) 3236 4188

admin@forteazza.com.au

PROPERTY COUNCIL of Queensland

Australian Institute of Project Management

Australian Building Development Association

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings.

All levels are approximate only and are subject to confirmation by licenced surveyor.

All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner.

Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL

HAYES
ANDERSON
LYNCH

ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au

Member
Australian
Institute of
Architects

Project	The Belvedere		
	5-7 Church st, 42 Donald st , NSW 2315		
Drawing Title	GA Plan - Ground		
Scale @ A3	Drawn:	Checked:	
1:250	SD	RH	
Project Number	Drawing Number	Issue	
H4700DON	SD303	Q	

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

GA Plan- Level 01

Scale @ A3 Drawn: Checked:

1:200, 1:250 SD RH

Project Number Drawing Number Issue

H4700DON SD304 Q

200

Level 01
1:250

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

GA Plan- Level 02

Scale @ A3	Drawn:	Checked:
1:200, 1:250 SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD305	Q

200

Level 02
1:250



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

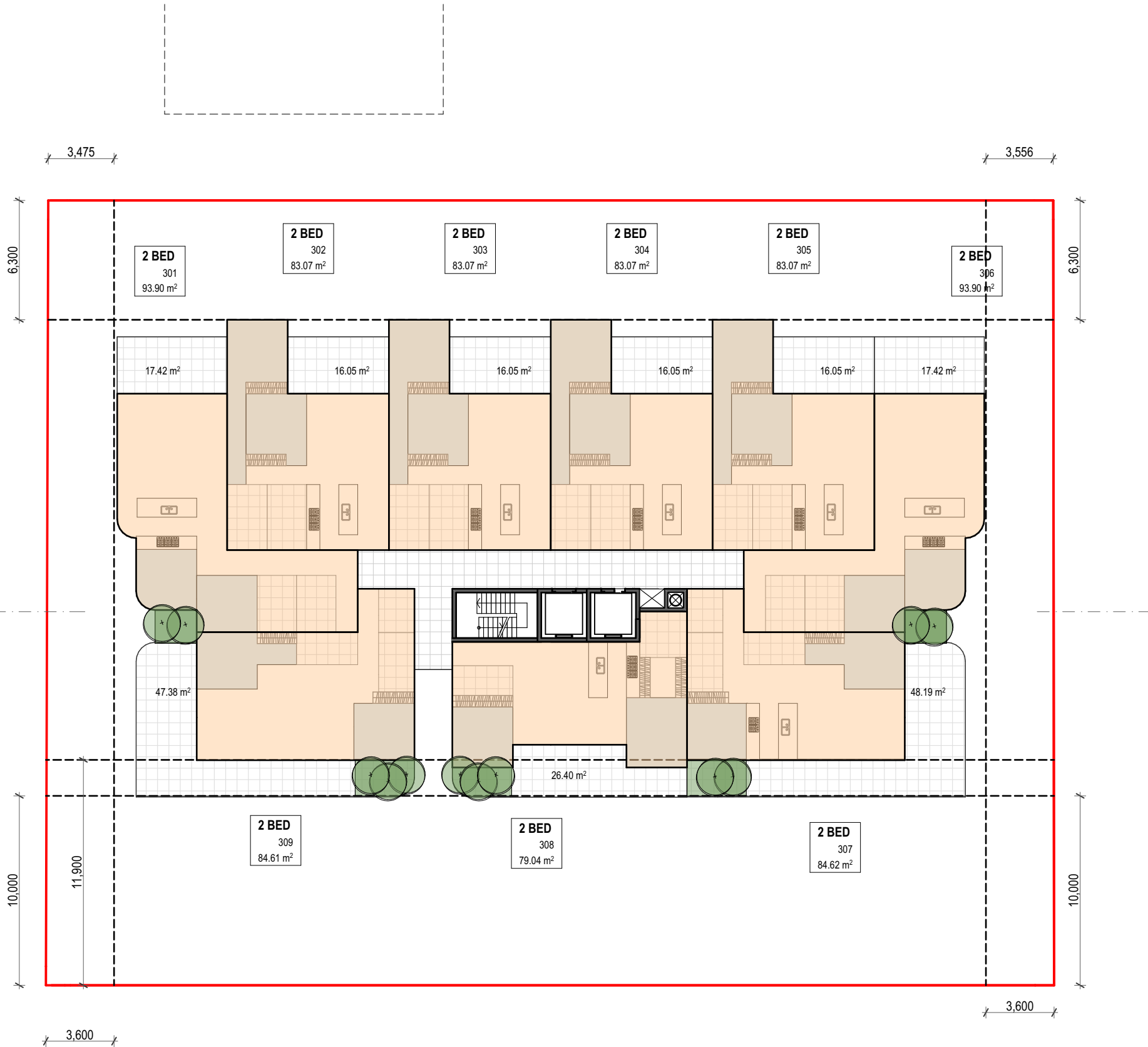
Drawing Title

GA Plan- Level 03

Scale @ A3	Drawn:	Checked:
1:200, 1:250 SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD306	Q

200

Level 03
1:250





200 Level 04 1:250

fortezza
GROUP

THE BELVEDERE
Developed by Fortezza Group

fortezza.com.au
+61 (07) 3236 4188
admin@fortezza.com.au

PROPERTY COUNCIL of Australia
Australian Institute of Project Management
AUSTRALIAN BUILDING DEVELOPERS ASSOCIATION

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date Issue Details Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au

Member
Australian
Institute of
Architects

Project	The Belvedere		
	5-7 Church st, 42 Donald st , NSW 2315		
Drawing Title	GA Plan- Level 04		
Scale @ A3	Drawn:	Checked:	
1:250	SD	RH	
Project Number	Drawing Number	Issue	
H4700DON	SD307	Q	

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

GA Plan- Level 05

Scale @ A3	Drawn:	Checked:
1:200, 1:250 SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD308	Q

200

Level 05
1:250



General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia #####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL
Date	Issue	Details	Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

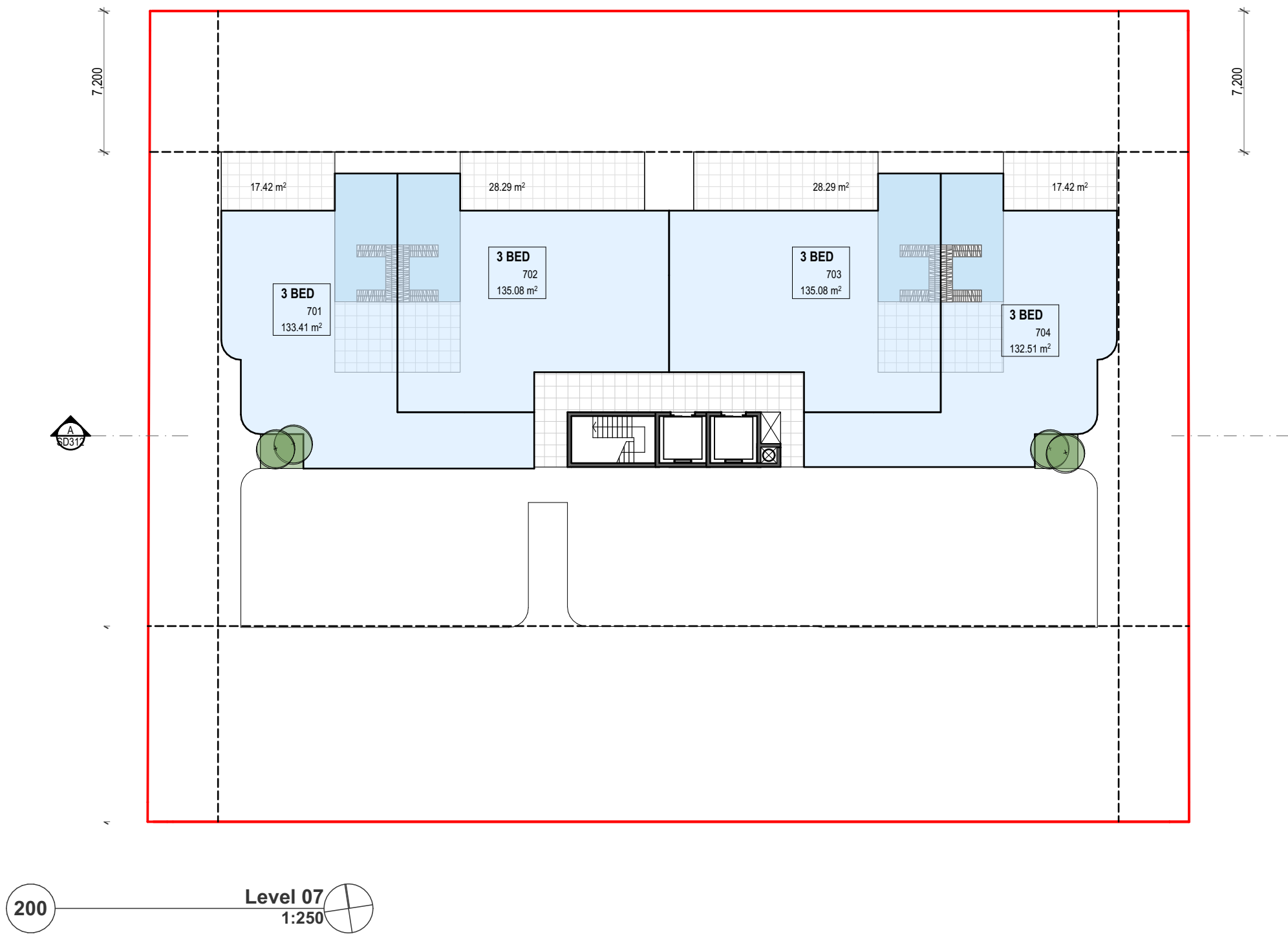
GA Plan- Level 06

Scale @ A3	Drawn:	Checked:
1:200, 1:250 SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD309	Q



200

Level 06
1:250



Sketch Design

forteazza

GROUP

THE BELVEDERE

Developed by Fortezza Group

forteazza.com.au

+61 (07) 3236 4188

admin@forteazza.com.au

PROPERTY COUNCIL of Australia

Australian Institute of Project Management

AUSTRALIAN BUILDING DEVELOPERS ASSOCIATION

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia ####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date	Issue	Details	Checked
------	-------	---------	---------

HAL

HAYES ANDERSON LYNCH

ARCHITECTS PTY LTD

ARCHITECTS

TOWN PLANNERS

INTERIOR DESIGNERS

3 / 709 MAIN STREET

KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0

E reception@halarchitects.com.au

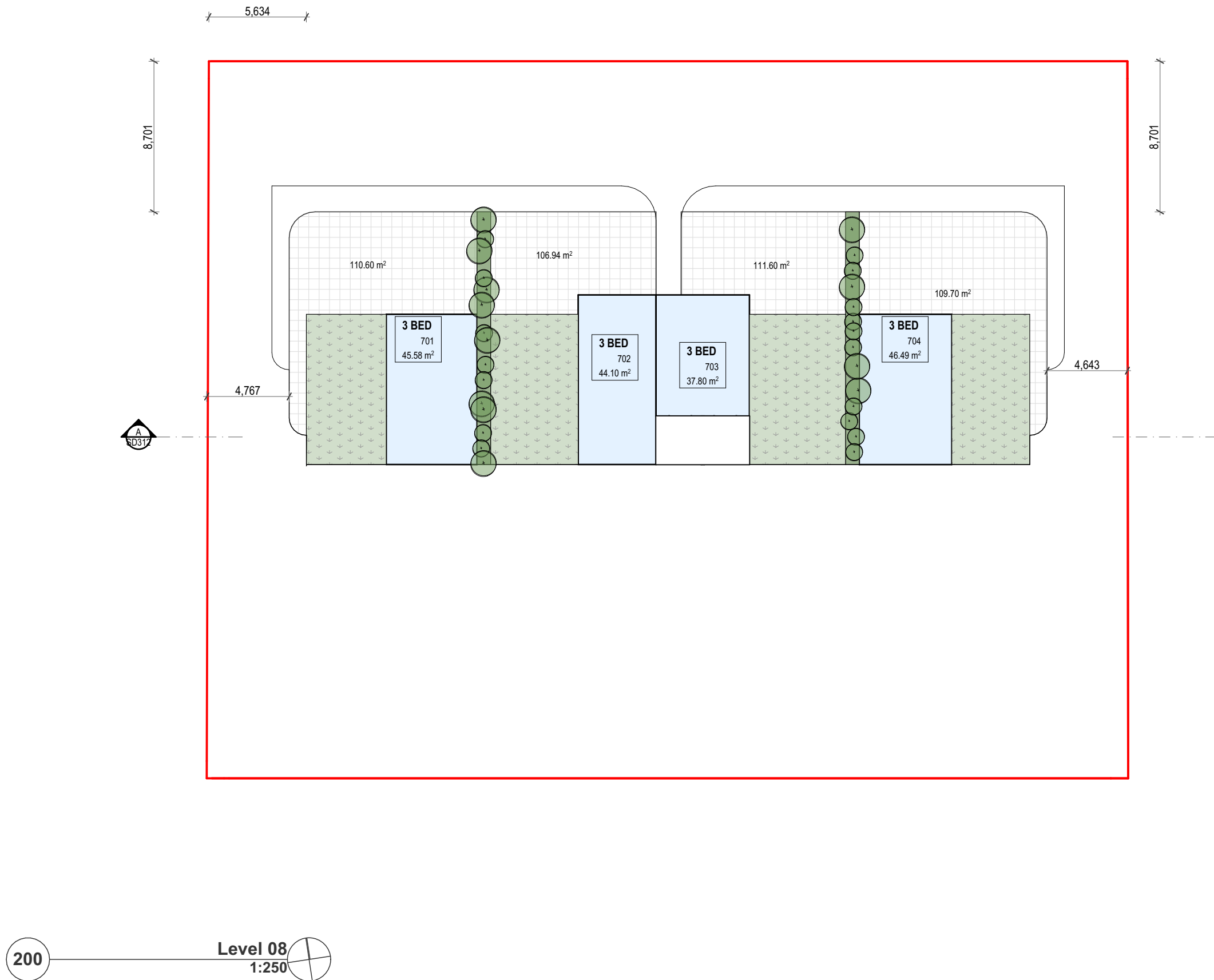
W www.halarchitects.com.au

Member Australian Institute of Architects

Project
The Belvedere
5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title
GA Plan- Level 07

Scale @ A3	Drawn:	Checked:
1:250	SD	RH
Project Number	Drawing Number	Issue
H4700DON	SD310	Q



Sketch Design

fortezza
GROUP

THE BELVEDERE
Developed by Fortezza Group

fortezza.com.au
+61 (07) 3236 4188
admin@fortezza.com.au

PROPERTY COUNCIL of Australia
Australian Institute of Project Management
AUSTRALIAN BUILDING DEVELOPERS ASSOCIATION

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia ####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date Issue Details Checked

HAL
HAYES
ANDERSON
LYNCH
ARCHITECTS PTY LTD

ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au

Member
Australian
Institute of
Architects

Project

The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

GA Plan - Level 08

Scale @ A3	Drawn:	Checked:
1:200, 1:250 SD		RH
Project Number	Drawing Number	Issue
H4700DON	SD311	Q

General Notes

This drawing is Copyright © Any design or drawing is not to be reproduced, either in whole or part, without written permission by Hayes Anderson Lynch Architects Pty. Ltd. Confirm all dimensions on site. Do not scale off drawings. All levels are approximate only and are subject to confirmation by licenced surveyor. All workmanship, materials and construction to comply with the Queensland Building Act 1975, the Queensland Development Code, the Building Code of Australia ####, Premises Standard and AS1428.1. Work to be carried out in a neat and appropriate manner. Where ambiguities or discrepancies exist, Hayes Anderson Lynch Architects Pty. Ltd. shall be contacted for clarification.

05/06/24	Q	Sketch Design	RH
03/06/24	P	Sketch Design	RH
24/04/24	N	Sketch Design	RH
08/04/24	M	Rear units removed	RH
20/12/23	L	2 Bed Level option	RH
05/12/23	K	2 Bed Level option	RH
16/11/23	J	Sketch Design	RH
16/11/23	H	Sketch Design	RH
09/11/23	G	Staggered Units	EA
31/10/23	F	Staggered Units	EA
09/10/23	E	Sketch Design	EA
26/09/23	D	Sketch Design	EA
08/09/23	C	Sketch Design	EA
31/08/23	B	Sketch Design	EA
07/07/23	A	Sketch Design	GL

Date Issue Details Checked



ARCHITECTS
TOWN PLANNERS
INTERIOR DESIGNERS

3 / 709 MAIN STREET
KANGAROO POINT QLD 4169

P + 61 7 3 8 5 2 3 1 9 0
E reception@halarchitects.com.au
W www.halarchitects.com.au



Project

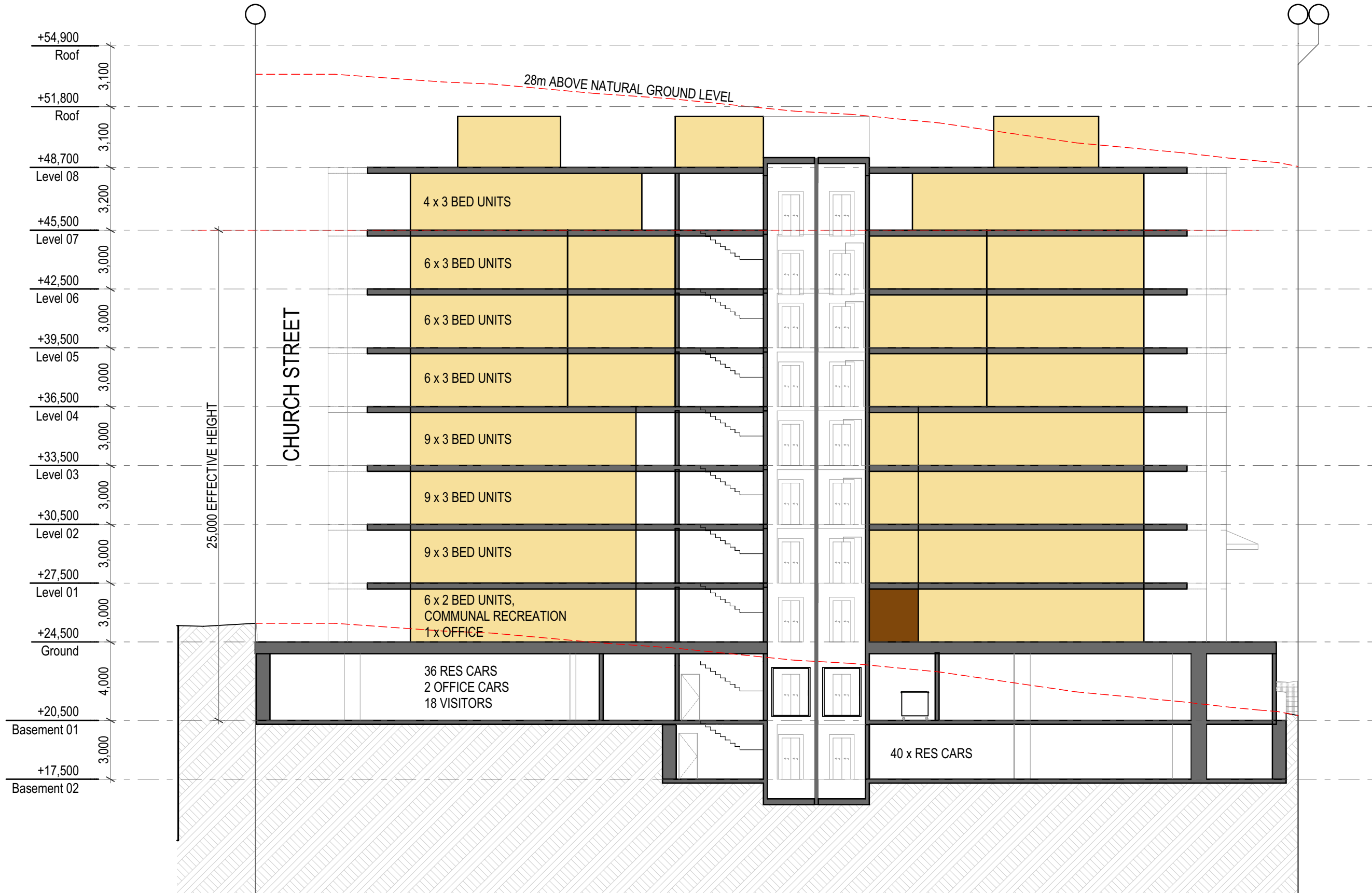
The Belvedere

5-7 Church st, 42 Donald st ,
NSW 2315

Drawing Title

Indicative Section

Scale @ A3	Drawn:	Checked:
1:200	SD	RH
Project Number	Drawing Number	Issue
H4700DON	SD312	Q



Section A
1:200

A

Appendix B

About this report

Introduction

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

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

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

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

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

Groundwater

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

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at

the time of construction as are indicated in the report; and

- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

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

Reports

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

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

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

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

continued next page

About this Report

Site Anomalies

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

Information for Contractual Purposes

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

Site Inspection

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

intentionally blank

intentionally blank

Appendix C

Site history information:

Historical aerial photograph review

Historical title deeds

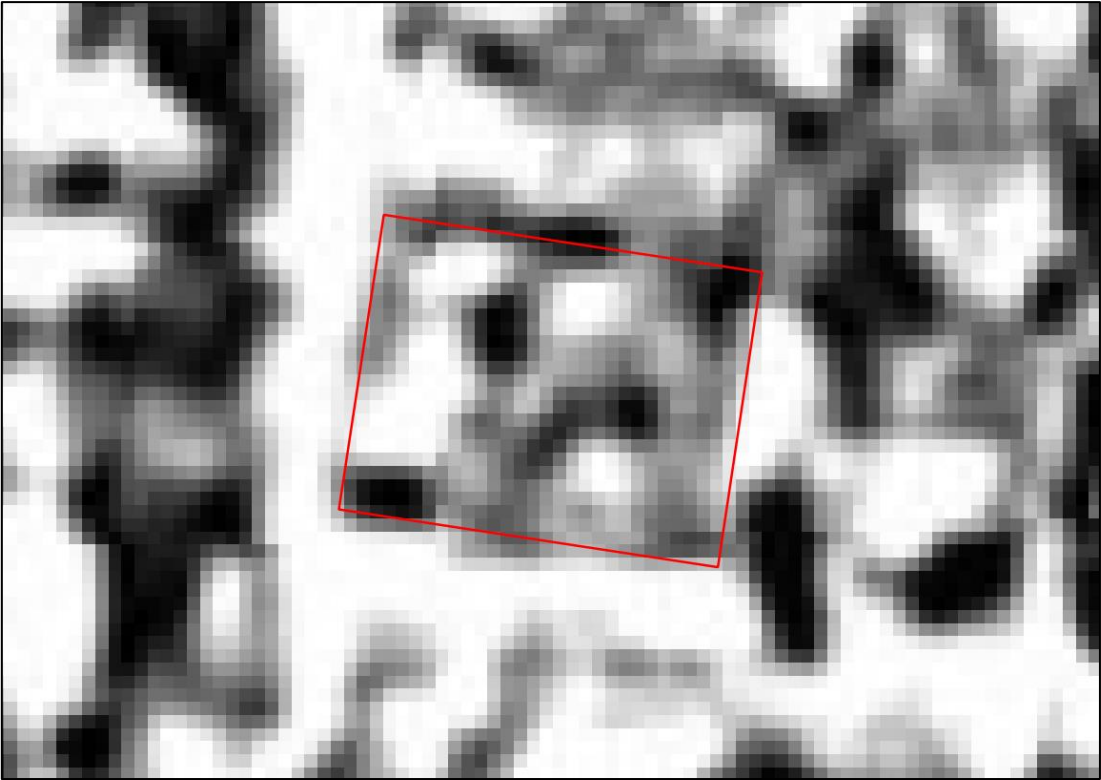
Section 10.7 planning certificates

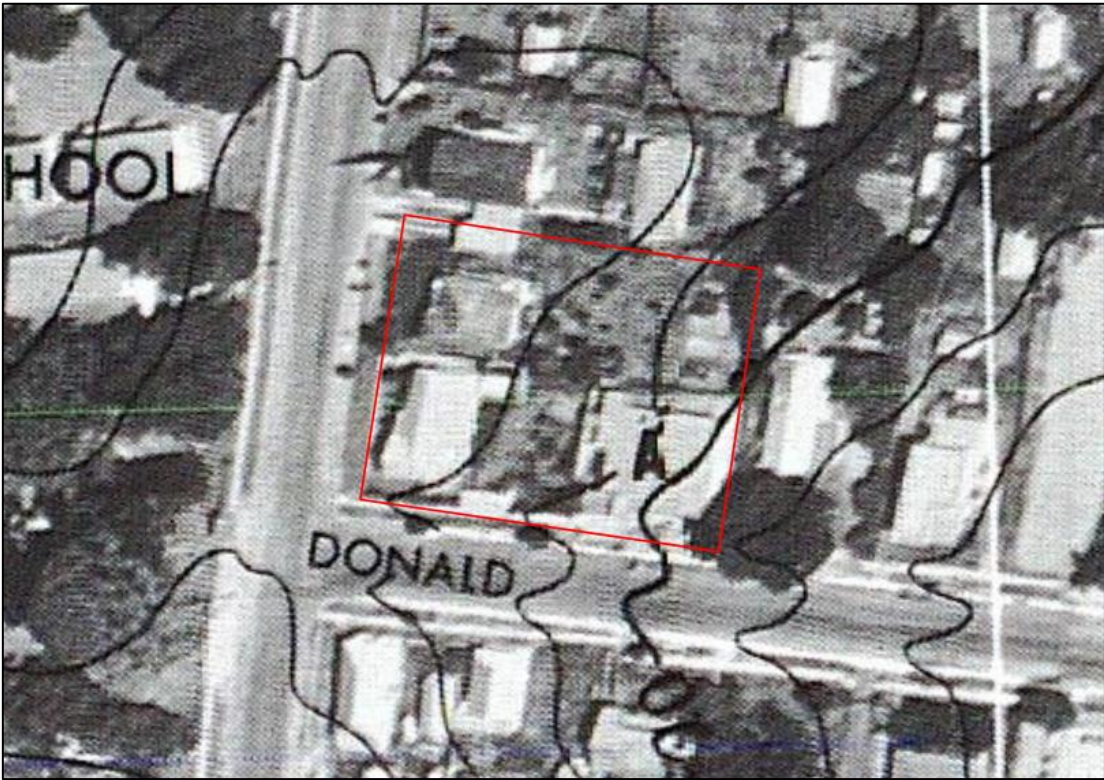
SafeWork NSW search

Table 1: Historical aerial review

Year Colour	Site	Surrounding land use
1963 B&W	Aerial was low quality. Four structures were present (probably residential dwellings/sheds)	Aerial was low quality. Church Street and Donald Street were present. Nearby properties appeared to be residential/commercial developments.
1976 B&W	Lot 15 appeared to be developed with a residential dwelling and garage in the western area and shed in the eastern area. Lot A appeared to be developed with a residential dwelling and adjoining shed. Lot B appeared to be developed with a commercial building.	Nearby properties appeared to be residential/commercial developments.
1993 Colour	Aerial was low quality. The structure that appeared in eastern area of Lot 15 appeared to have been demolished.	Aerial was low quality. Property to the east had been developed into a commercial development and carpark.
2007 Colour	Lot 15 was developed with a residential dwelling, garage to the north of the dwelling and a smaller shed to the east of the dwelling. Lot A was developed with a residential dwelling. There appeared to be an adjoining garage and/or shed to the south of the dwelling and an adjoining shed/alteration to the east of the dwelling. Lot B was developed with a residential dwelling in the south-eastern area of the site (red roof in 1993 aerial) appeared to have been demolished and developed with a new commercial development and carpark.	Properties to the north appeared to be developed (residential). Property to the south has been demolished.
2010 Colour	Similar to previous aerial.	Similar to previous aerial.
2015 Colour	Surface soils in Lot A and Lot 15 appeared to be disturbed/patchy (possible fill / demolition materials across surface). Garage/shed in Lot A east of the residence has been demolished.	Similar to previous aerial.
2019 Colour	Dwelling and adjoining garage/sheds in the south-western area of the site (Lot A) had been demolished.	Similar to previous aerial.
2021 Colour	Similar to previous aerial.	Similar to previous aerial.
2022 Colour	Similar to previous aerial.	Similar to previous aerial.
2023 Colour	Similar to previous aerial.	Similar to previous aerial.
30 May 2024 Colour	Similar to previous aerial.	Similar to previous aerial.

Table 2: Historical aerals

Year Colour	Aerial
1963 B&W	

Year Colour	Aerial
1976 B&W	
1993 Colour	

Year Colour	Aerial
2007 Colour	
2010 Colour	

Year Colour	Aerial
2015 Colour	
2019 Colour	

Year Colour	Aerial
2021 Colour	
2022 Colour	

Year Colour	Aerial
2023 Colour	
30 May 2024 Colour	

Table 1: Historical title deeds – Lot A DP417172

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
1921 to 1945	Edward Charles Robinson (Fisherman)	Residential
1945 to 1989	James Hastings Spence (Station Overseer) Heather May Spence (Married)	Residential
1989 to 1995	Heather May Spence (Widow) (Notice of Death)	Residential
1995 to 2022	Thomas Gergich Kathleen Gergich Michael Gergich	Residential
2022 to 2022	Michael Gergich Millie Anne Lulic (Re the Estate of Thomas Gergich) Kathleen Gergich Michael Gergich	Residential
2022 to 2024	Michael Gergich Millie Anne Lulic	Residential

Table 2: Historical title deeds – Lot B DP417172

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
1921 to 1945	Edward Charles Robinson (Fisherman)	Possibly residential
1945 to 1960	James Hastings Spence (Station Overseer) Heather May Spence (Married)	Possibly residential
1960 to 1963	Gorge Alan Wise (Public Servant) Ivy Thelma Wise (Married Woman)	Possibly residential
1963 to 2011	New South Wales Ambulance Transport Service Board Newcastle District	Ambulance depot
2011 to 2011	Health Administration Corporation	Ambulance depot
2011 to 2022	Thomas Gergich Kathleen Gergich Michael Gergich	Commercial (hairdresser)
2022 to 2022	Michael Gergich Millie Anne Lulic (Re the Estate of Thomas Gergich) Kathleen Gergich Michael Gergich	Commercial (hairdresser)
2022 to 2024	# Michael Gergich # Millie Anne Lulic (Re the Estates of Thomas Gergich & Kathleen Gergich) # Michael Gergich	Commercial (hairdresser)

Table 3: Historical title deeds –15 DP 5616

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
1921 to 1962	James Herbert Robinson (Barman)	Residential
1922 to 1923	Edward Charles Robinson (Farmer)	Residential
1923 to 1946	Cecil Lloyd Williams (Tramway Employee)	Residential
1946 to 1946	Perpetual Trustee Company (Limited)	Residential
1946 to 1962	Alfred Henery Joseph Richardson (Lorry Driver) Enid Richardson (Married Woman)	Residential
1962 to 1968	Elva Dawn Warren Stevens (Secretary)	Residential
1968 to 1971	Carl Brewer (Builder) Betty Scott Brewer (Married Woman)	Residential
1971 to 1978	John Bolton (Flat Proprietor) Maitland Mary Bolten (Married Woman) Now Magdalene Mary Bolton	Residential
1978 to 1992	Magdalene Mary Bolton (Widow)	Residential
1992 to 2022	Thomas Gergich Kathleen Gergich Michael Gergich	Residential
2022 to 2022	Michael Gergich Thomas Gergich	Residential
2022 to 2024	Michael Gergich Millie Anne Lulic	Residential



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Address: - 5-7 Church & 42 Donald Street, Nelson Bay NSW 2315

Description: - Lots A & B D.P. 417172 & Lot 15 Section A D.P. 5616

As Regards to Lot A D.P. 417172

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
08.06.1921 (1921 to 1945)	Edward Charles Robinson (Fisherman)	Volume 3205 Folio 138
30.11.1945 (1945 to 1989)	James Hastings Spence (Station Overseer) Heather May Spence (Married)	Volume 3205 Folio 138 Now Volume 8059 Folio 12
30.10.1989 (1989 to 1995)	Heather May Spence (Widow) (Notice of Death)	Volume 8059 Folio 12 Now A/417172
28.02.1995 (1995 to 2022)	Thomas Gergich Kathleen Gergich Michael Gergich	A/417172
19.08.2022 (2022 to 2022)	Michael Gergich Millie Anne Lulic (Re the Estate of Thomas Gergich) Kathleen Gergich Michael Gergich	A/417172
17.12.2022 (2022 to Date)	# Michael Gergich # Millie Anne Lulic (Re the Estates of Thomas Gergich & Kathleen Gergich) # Michael Gergich	A/417172

Denotes Current Registered Proprietor(s)

Easements: - NIL

Leases: - NIL

Continued Over.



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As Regards to Lot B D.P. 417172

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
08.06.1921 (1921 to 1945)	Edward Charles Robinson (Fisherman)	Volume 3205 Folio 138
30.11.1945 (1945 to 1960)	James Hastings Spence (Station Overseer) Heather May Spence (Married)	Volume 3205 Folio 138
26.08.1960 (1960 to 1963)	Gorge Alan Wise (Public Servant) Ivy Thelma Wise (Married Woman)	Volume 3205 Folio 138 Now Volume 8059 Folio 13
14.01.1963 (1963 to 2011)	New South Wales Ambulance Transport Service Board Newcastle District	Volume 8059 Folio 13 Now B/417172
17.08.2011 (2011 to 2011)	Health Administration Corporation	B/417172
24.08.2011 (2011 to 2022)	Thomas Gergich Kathleen Gergich Michael Gergich	B/417172
19.08.2022 (2022 to 2022)	Michael Gergich Millie Anne Lulic (Re the Estate of Thomas Gergich) Kathleen Gergich Michael Gergich	B/417172
17.12.2022 (2022 to Date)	# Michael Gergich # Millie Anne Lulic (Re the Estates of Thomas Gergich & Kathleen Gergich) # Michael Gergich	B/417172

Denotes Current Registered Proprietor(s)

Easements: - NIL

Leases: -

- 17.07.2013 (AH881886): Lease – Surrendered or Expired by an effluxion of time. Not investigated.
- 16.08.2018 (AN587342): Lease. Expires 31.07.2022. Options of renewal 5 years.
 - 02.09.2019 (AP419632): Transfer of Lease AN587342 to Jeanine Kastelyn.

Continued Over.



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

As Regards to Lot 15 Section A D.P. 5616

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
15.07.1921 (1921 to 1962)	James Herbert Robinson (Barman)	Volume 3205 Folio 162
18.10.1922 (1922 to 1923)	Edward Charles Robinson (Farmer)	Volume 3205 Folio 162
26.04.1923 (1923 to 1946)	Cecil Lloyd Williams (Tramway Employee)	Volume 3205 Folio 162
29.01.1946 (1946 to 1946)	Perpetual Trustee Company (Limited) (Transmission Application – Not Investigated)	Volume 3205 Folio 162
25.06.1946 (1946 to 1962)	Alfred Henery Joseph Richardson (Lorry Driver) Enid Richardson (Married Woman)	Volume 3205 Folio 162
04.04.1962 (1962 to 1968)	Elva Dawn Warren Stevens (Secretary)	Volume 3205 Folio 162
27.11.1968 (1968 to 1971)	Carl Brewer (Builder) Betty Scott Brewer (Married Woman)	Volume 3205 Folio 162
06.08.1971 (1971 to 1978)	John Bolton (Flat Proprietor) Maitland Mary Bolton (Married Woman) Now Magdalene Mary Bolton	Volume 3205 Folio 162
07.12.1978 (1978 to 1992)	Magdalene Mary Bolton (Widow) (Notice of Death)	Volume 3205 Folio 162 Now 15/A/5616
06.04.1992 (1992 to 2022)	Thomas Gergich Kathleen Gergich Michael Gergich	15/A/5616
28.02.2022 (2022 to 2022)	Michael Gergich Thomas Gergich (Notice of Death)	15/A/5616
17/12/2022 (2022 to Date)	# Michael Gergich # Millie Anne Lulic (Transmission Application)	15/A/5616

Denotes Current Registered Proprietor(s)

Easements: - NIL

Leases: - NIL



ABN: 36 092 724 251

Ph: 02 9099 7400

(Ph: 0412 199 304)

Yours Sincerely

Emily Shackleton

(Checked by Taylor Wilson)

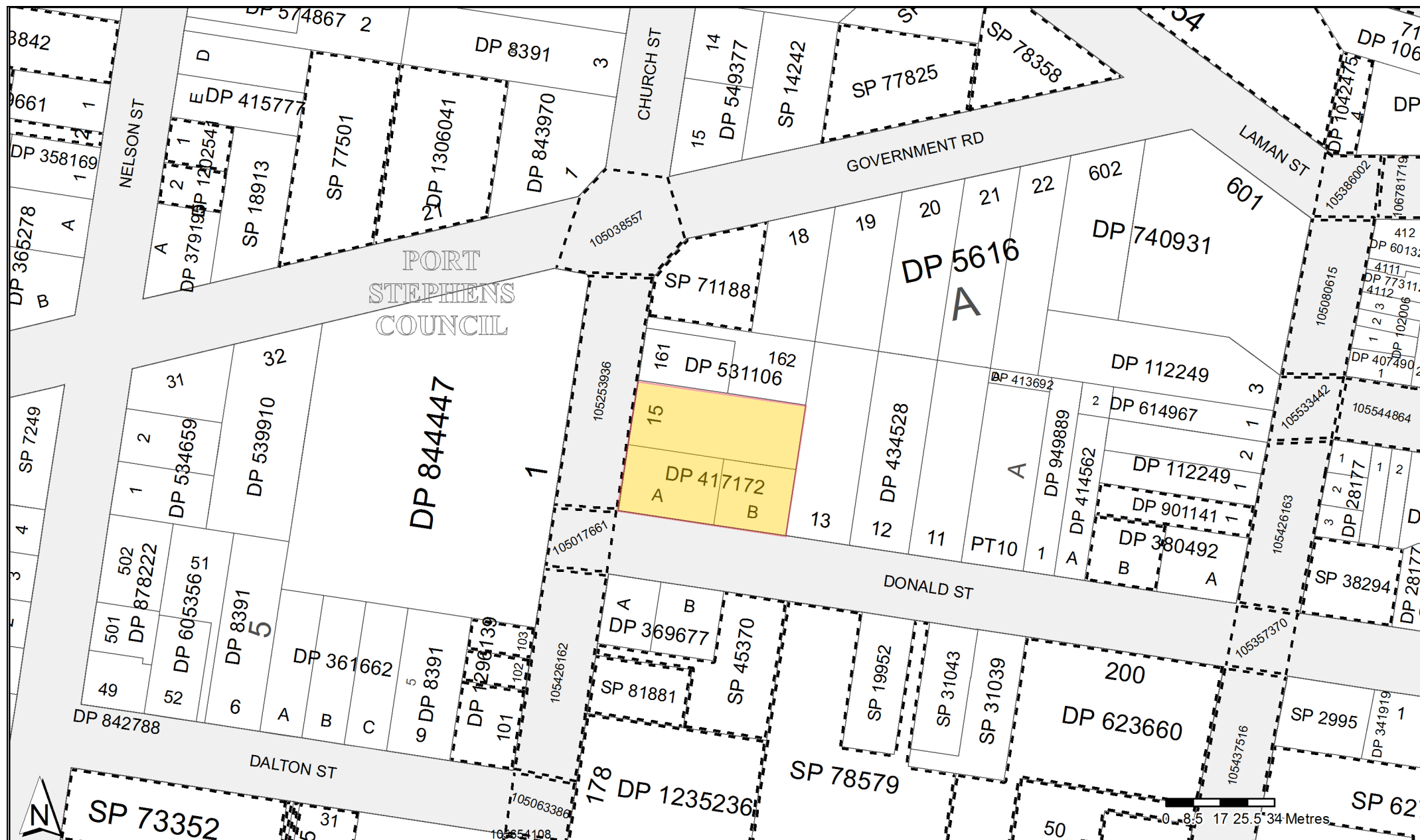
15 July 2024

Level 14, 135 King Street, Sydney

Sydney 2000

GPO Box 4103 Sydney NSW 2001

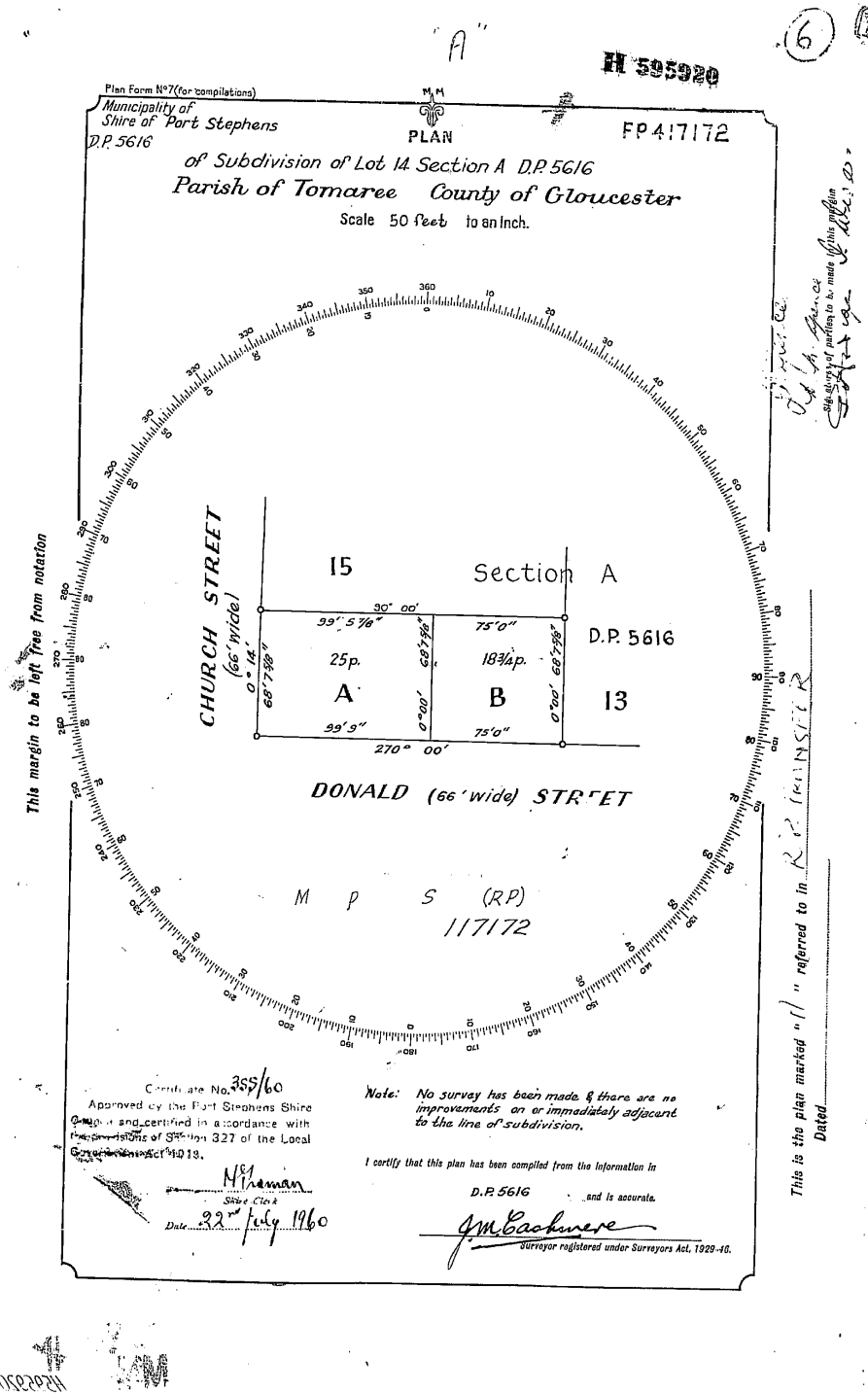
DX 967 Sydney



10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000
I, Bruce Richard Davies, 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 3rd day of June, 1960																																																																																																			
APPROVED AND/OR ADDITIONS NOTED ON PLAN IN REGISTRAR GENERAL'S OFFICE.																																																																																																			

1

CONVERSION TABLE ADDED IN DEPARTMENT OF LANDS		
DP 417172		
FEET INCHES		METRES
66 -		20.117
68 7 5/8		20.920
75 -		22.860
99 5 7/8		30.324
99 9		30.404
750 -		228.600
AC RD P		SQ M
- - 18 3/4		474.2
- - 25		632.3



✦ S. PORT STEPHENS ✦

12.8.9

51
12/8/09

P L A N

5616

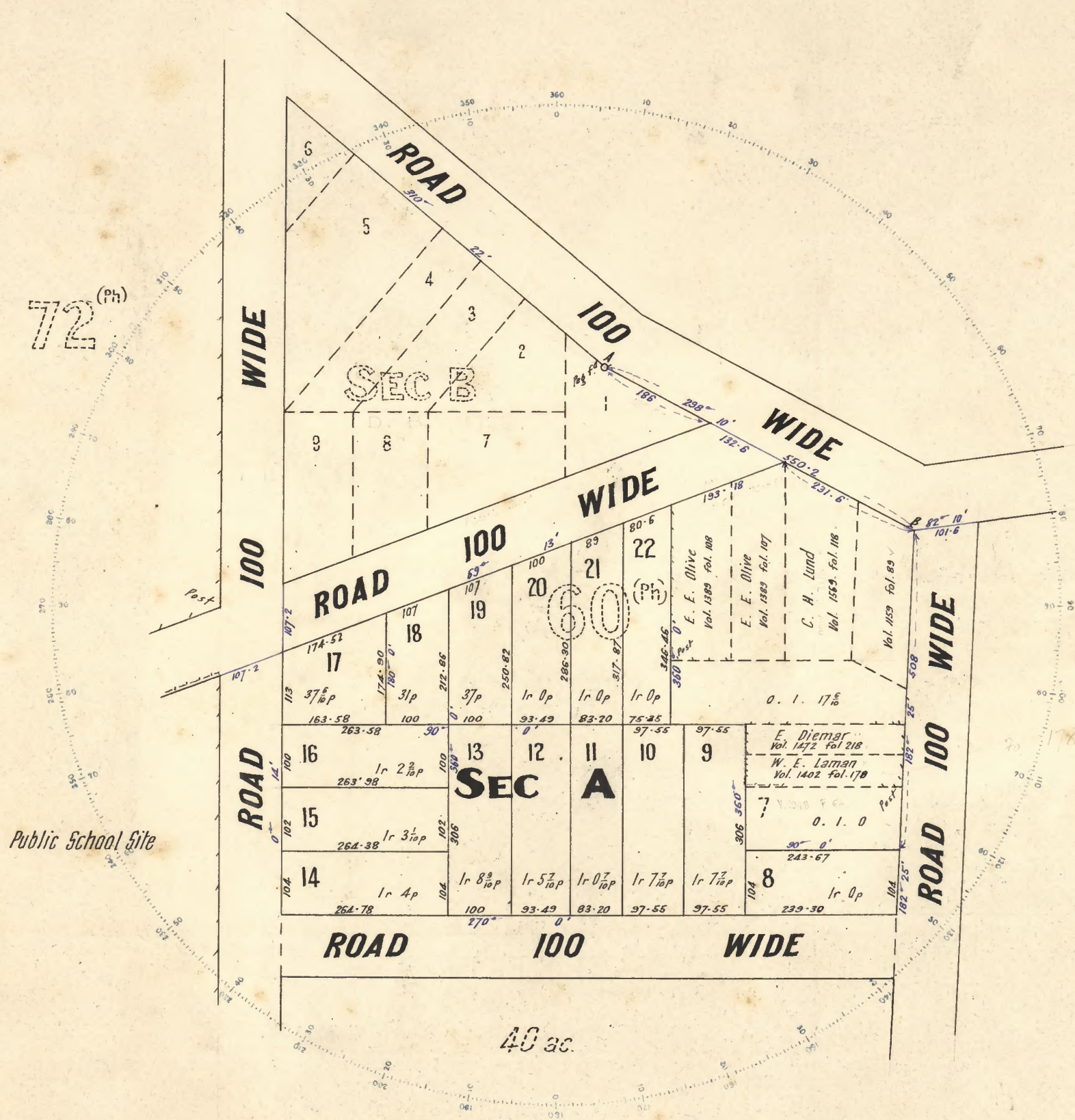
Of Allotments 8 to 22, Section A, subdivision of part of Portion 60

Parish of Tomaree

County of Gloucester

DP5616

C.T.V.L.H.S.D.G.



DECLARATION.

I *Charles Frederick Napier North* of *Waratah*
Licensed Surveyor, specially licensed under the Real Property Act, do hereby solemnly
and sincerely declare that the boundaries and measurements shown on this Plan are
correct for the purposes of the said Act, and that the said Plan and the survey of
the land to which the same relates, have been prepared and made by me, or under my
immediate supervision; and I make this solemn declaration conscientiously believing
the same to be true, and by virtue of the provisions of the Oaths Act 1900

Subscribed and declared before me at *Newcastle*
this *28* day of *June* A.D. 190 *9*

W. H. Cunningham J.P.

C. H. Lund
Licensed Surveyor

Date of Survey *27th May 1909*

Assumed Magnetic Variation *2° 30' E*
Azimuth taken from *A. B.*

Scale 2 Chains to an Inch.



SEARCH DATE

11/7/2024 11:24AM

FOLIO: A/417172

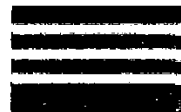
First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 8059 FOL 12

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
31/8/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
13/10/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
30/10/1989	Y675182	NOTICE OF DEATH	EDITION 1
28/2/1995	050242	TRANSFER	
28/2/1995	050243	MORTGAGE	EDITION 2
28/9/1998	5293012	CAVEAT	
3/8/1999	6059537	DEPARTMENTAL DEALING	
17/7/2001	7778134	DISCHARGE OF MORTGAGE	EDITION 3
12/8/2015	AJ725220	DEPARTMENTAL DEALING	
19/8/2022	AS402089	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 4
17/12/2022	AS725946	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 5
28/3/2023	AS960661	WITHDRAWAL OF CAVEAT	EDITION 6

*** END OF SEARCH ***

1070



Y675182

[Redacted] H

ND

B 1st 1
\$ 44

R11

SECTION 101, REAL PROPERTY ACT, 1900
(See Instructions for Completion on back of form)

DESCRIPTION
OF LAND
Note (a)

LAND of which deceased is a registered proprietor	
Torrens Title Reference	Torrens Title Reference
VOLUME 8059 FOLIO 12 now being — A/417172	

REGISTERED
DEALING
Note (b)

Type of Dealing	Registered Number	Torrens Title Reference

DECEASED
REGISTERED
PROPRIETOR
Note (c)

[Redacted]	OFFICE USE ONLY N
------------	----------------------

Note (d)

(the abovenamed DECEASED) is registered as one of the proprietors of the land above described, ~~abovementioned registered dealing~~. The APPLICANT

APPLICANT
Note (e)

HEATHER MAY SPENCE of 7 Church Street, Nelson Bay, widow	OFFICE USE ONLY S.
---	-----------------------

Note (d)

being the SURVIVING JOINT TENANT, hereby applies to be registered as proprietor of the estate or interest comprised in the land above described, ~~abovementioned registered dealing~~.

STATUTORY DECLARATION

I solemnly and sincerely declare that the said James Hastings Spence
died at Nelson Bay in the State of New South Wales on 20th September 1989
that particulars of such death are registered in the said State, and that the said deceased is identical with James Hastings Spence
one of the registered proprietors of the ~~land above described~~ ~~abovementioned registered dealing~~.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths Act, 1900, and I hereby certify this application to be correct for the purposes of the Real Property Act, 1900.

Made and subscribed at Newcastle the 4th day of October 1989 in the presence of

Peter Thompson J.P.
Signature of Witness

PETER ALEXANDER THOMSON
Name of Witness (BLOCK LETTERS)

158 KING ST NEWCASTLE
Address and qualification of Witness

A JUSTICE OF THE PEACE

[Signature]
Signature of Applicant

TO BE COMPLETED
BY LODGING PARTY
Notes (h) and (i)

LODGED BY		LOCATION OF DOCUMENTS	
LODGED BY: PUBLIC TRUSTEE		CT	OTHER
19 O'CONNELL ST., SYDNEY		☒	☐
PHONE 240 0735			
Delivery Box Number 706F		Herewith. ☒ In R.G.O. with _____ Produced by _____	
Extra Fee	Checked by: EA 16 2	REGISTERED 231 4527 -19 30 OCT 1989 Registrar General	
		CT	706 F

OFFICE USE ONLY

97-01T



TRANSFER

Real Property Act, 1900



0
050242 0

82

Office of State Revenue New South Wales

00.00

020295 2621 04 200916077/03

(A) **LAND TRANSFERRED**

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

WHOLE

(B) **LODGED BY**

L.T.O. Box

Name, Address or DX and Telephone

40L

STATE BANK OF NEW SOUTH WALES LIMITED
DX 1334 SYDNEY 841 6196

REFERENCE (max. 15 characters): CERGICH

(C) **TRANSFEROR**

1 of 7 Church Street Nelson Bay

(D) acknowledges receipt of the consideration of One Hundred and Fifty Five Thousand Dollars (\$155,000).....

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

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

(F) **TRANSFEEE**

T

1 of 2A Guthrie Avenue Cremorne as to 49/100,

1 of 2A Guthrie Avenue Cremorne as to 49/100,

1 of 3 Edgecliffe Esplanade Seaforth as to 2/100

TENANCY: as tenants in common

(G)

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

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

W.G.H. Barrett

Signature of Witness

W.G.H. BARRETT

Name of Witness (BLOCK LETTERS)
SOLICITOR

Address of Witness
NELSON BAY

A. M. ...

Signature of Transferor

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

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

R. ...

RANDON ILIC

12-95

Signature of Transferee

Solicitor of Transferee

CHECKED BY (office use only)

25
X

Lodger Details

Lodger Code 505899
Name RAYMOND DAVID PERKES RAYMOND PERKES LAWYER
Address PO BOX 386 CROWS NEST 1585
Lodger Box 1W
Email RAYPERKES@BIGPOND.COM
Reference GER0222.2

For Office Use Only

AS402089

TRANSMISSION APPLICATION

Jurisdiction NEW SOUTH WALES

Privacy Collection Statement

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

Land Title Reference

A/417172
B/417172

Deceased Registered Proprietor

Given Name(s) THOMAS
Family Name GERGICH
Date of Death 2022-01-16
Pursuant to Probate No. 2022/00096037
Granted on 2022-06-02

Applicant

Given Name(s) MICHAEL
Family Name(s) GERGICH
Capacity EXECUTOR
as Joint Tenants
Given Name(s) MILLIE ANNE
Family Name(s) LULIC
Capacity EXECUTOR
as Joint Tenants
Tenancy TENANTS IN COMMON

The Applicant applies to be registered as proprietor of the Estate of the deceased registered proprietor as specified in this Instrument.

APPLICANT EXECUTION

The Certifier has taken reasonable steps to verify the identity of the applicant or his, her or its administrator or attorney.
The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
The Certifier has retained the evidence supporting this Registry Instrument or Document.
The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of MICHAEL GERGICH
Signer Name RAYMOND DAVID PERKES
Signer Organisation RAYMOND DAVID PERKES
Signer Role PRACTITIONER CERTIFIER
Execution Date 18/08/2022

The Certifier has taken reasonable steps to verify the identity of the applicant or his, her or its administrator or attorney.
The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
The Certifier has retained the evidence supporting this Registry Instrument or Document.
The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of MILLIE ANNE LULIC
Signer Name RAYMOND DAVID PERKES
Signer Organisation RAYMOND DAVID PERKES
Signer Role PRACTITIONER CERTIFIER
Execution Date 18/08/2022



FOLIO: A/417172

SEARCH DATE	TIME	EDITION NO	DATE
11/7/2024	11:23 AM	6	28/3/2023

LAND

LOT A IN DEPOSITED PLAN 417172
LOCAL GOVERNMENT AREA PORT STEPHENS
PARISH OF TOMAREE COUNTY OF GLOUCESTER
TITLE DIAGRAM DP417172

FIRST SCHEDULE

MICHAEL GERGICH
MILLIE ANNE LULIC
AS JOINT TENANTS IN 98/100 SHARE
MICHAEL GERGICH
IN 2/100 SHARE
AS TENANTS IN COMMON (AE AS725946)

SECOND SCHEDULE (1 NOTIFICATION)

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

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

11/7/2024 9:01PM

FOLIO: B/417172

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

Prior Title(s): VOL 8059 FOL 13

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
31/8/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
13/10/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
17/8/2011	AG403730	APPLICATION TO RECORD A NEW REGISTERED PROPRIETOR	EDITION 1
24/8/2011	AG454844	TRANSFER	EDITION 2
17/7/2013	AH881886	LEASE	EDITION 3
16/8/2018	AN587342	LEASE	EDITION 4
2/9/2019	AP419632	TRANSFER OF LEASE	EDITION 5
19/8/2022	AS402089	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 6
17/12/2022	AS725946	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 7

*** END OF SEARCH ***

Form: 01T
Release: 4.2
www.lpma.nsw.gov.au

①

TRANSFER

New South Wales
Real Property Act 1900



AG454844H

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar to use the information provided on this form for the establishment and maintenance of the Real Property Act Register. The Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY

Office of State Revenue use only

Office of State Revenue
NSW Treasury
Client No: 1411509
Duty: 1107 Trans No: 6342904
Asst details: 19.07.11

(A) TORRENS TITLE

B/417172

(B) LODGED BY

Document
Collection
Box
IW

Name, Address or DX, Telephone, and Customer Account Number if any

PAUL NASS
DX21720

Sols
Neutral Bay Ph: 99084666

Reference: 24.01.11 Gergich.

CODES

T JT
TF TJ
TK TW

(C) TRANSFEROR

H [REDACTED] N

(D) CONSIDERATION

The transferor acknowledges receipt of the consideration of \$ 605,000.00 and as regards

(E) ESTATE

the abovementioned land transfers to the transferee an estate in fee simple

(F) SHARE TRANSFERRED

(G) ENCUMBRANCES (if applicable):

(H) TRANSFeree

TH [REDACTED] as to 49/100 shares, [REDACTED] as to 49/100 shares
and [REDACTED] H as to 2/100 shares

(I)

TENANCY: Tenants in Common

DATE

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

Certified correct for the purposes of the Real Property Act 1900 by the authorised officer named below.

Signature of witness:

B. Wilson

Signature of authorised officer:

Stephen Gardner

Name of witness:

Bryson Wilson

Authorised officer's name: Stephen Gardner

Address of witness:

73 Miller St, North Sydney

Authority of officer:

Delegate

Signing on behalf of:

Health Administration Corporation

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

Signature:

Paul Nass

Signatory's name:

Signatory's capacity:

PAUL NASS

transferees' solicitor

(K) The transferee certifies that the eNOS data relevant to this dealing has been submitted and stored under

eNOS ID No. [REDACTED]

Full name:

Signature:



FOLIO: B/417172

SEARCH DATE	TIME	EDITION NO	DATE
11/7/2024	8:59 PM	7	17/12/2022

LAND

LOT B IN DEPOSITED PLAN 417172

LOCAL GOVERNMENT AREA PORT STEPHENS
PARISH OF TOMAREE COUNTY OF GLOUCESTER
TITLE DIAGRAM DP417172

FIRST SCHEDULE

MICHAEL GERGICH

MILLIE ANNE LULIC

AS JOINT TENANTS IN 98/100 SHARE

MICHAEL GERGICH

IN 2/100 SHARE

AS TENANTS IN COMMON

(AE AS725946)

SECOND SCHEDULE (2 NOTIFICATIONS)

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

2 AN587342 LEASE TO JEANNINE KASTELYN (SEE AP419632). EXPIRES:
31/7/2022. OPTION OF RENEWAL: 5 YEARS.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***



SEARCH DATE

11/7/2024 9:45PM

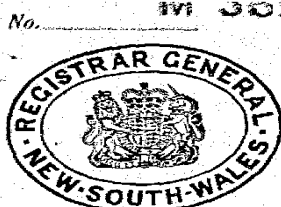
FOLIO: 15/A/5616

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

Prior Title(s): VOL 3205 FOL 162

Recorded	Number	Type of Instrument	C.T. Issue
17/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
6/4/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
6/4/1992	E369865	TRANSFER	EDITION 1
28/9/1998	5293012	CAVEAT	
3/8/1999	6059514	DEPARTMENTAL DEALING	
12/8/2015	AJ725220	DEPARTMENTAL DEALING	
28/2/2022	AR914506	NOTICE OF DEATH	EDITION 2
21/6/2022	AS235176	TRANSMISSION APPLICATION (EXECUTOR, ADMINISTRATOR, TRUSTEE)	EDITION 3
28/3/2023	AS960661	WITHDRAWAL OF CAVEAT	EDITION 4

*** END OF SEARCH ***



(Trusts must not be disclosed in the transfer.)

Typing or handwriting in this instrument should not extend into any margin. Handwriting should be clear and legible and in permanent black non-copying ink.

a If a less estate, strike out "in fee simple" and interline the required alteration.

b State in full the name of the person who furnished the consideration monies.

c Show in BLOCK LETTERS the full name, postal address and description of the persons taking.

d If more than one person is taking state whether they hold as joint tenants or tenants in common.

e The description may refer to the defined residue of the land in a certificate or grant (e.g., "and being residue after Transfer No. ") or may refer to parcels shown in Town or Parish Maps issued by the Dept of Lands or shown in plans filed in the Office of the Registrar General (e.g., "and being lot sec. D.P. "). Unless authorised by Reg. 53 of the Conveyancing Act Regulations, 1961, a plan may not be annexed to or endorsed on this transfer form.

f A very short note will suffice.

g Execution in New South Wales may be proved if this instrument is signed or acknowledged before the Registrar General, or Deputy Registrar General, or a Notary Public, a J.P., or Commissioner for Affidavits, to whom the Transferor is known, otherwise the attesting witness should appear before one of the above functionaries who having questioned the witness should sign the certificate on the back of this form.

As to instruments executed elsewhere, see Section 107 of the Real Property Act, 1900, Section 168 of the Conveyancing Act, 1919, and Section 52A of the Evidence Act, 1898.

h Repeat attestation if necessary.

If the Transferor or Transferee signs by a mark, the attestation must state "that the instrument was read over and explained to him, and that he appeared fully to understand the same."

NOT TO BE ALTERED BY ERASURE—See Foot Note

71 AUG 10 PM 12:03

NEW SOUTH WALES

\$=00.75

New South Wales

MEMORANDUM OF TRANSFER

(REAL PROPERTY ACT, 1900)

Lodgment —
Endorsement —

\$ 12.00

I, CARL BREWER of Nelson Bay, Builder and
BETTY SCOTT BREWER his wife

(herein called transferors)

being registered as the proprietor of an estate in fee simple* in the land hereinafter described, subject, however, to such encumbrances, liens and interests as are notified hereunder, in consideration of FIFTEEN THOUSAND DOLLARS

(\$15,000.00) (the receipt whereof is hereby acknowledged) paid to us by

John Bolton and Maitland Mary Bolton

do hereby transfer to

JOHN BOLTON OF 45 VICTORIA ROAD, NELSON BAY, FLAT PROPRIETOR AND

MAITLAND MARY BOLTON OF THE SAME PLACE HIS WIFE

(herein called transferee)^d as Joint Tenants

ALL such our Estate and Interest in ALL THE land mentioned in the schedule following:—

County	Parish	Reference to Title			Description of Land (if part only)*
		Whole or Part	Vol.	Fol.	
GLOUCESTER	TOMAREE	WHOLE	3205	162	

ENCUMBRANCES, &c., REFERRED TO[†]

Reservations of minerals contained in Crown Grant

Signed at Nelson Bay the 6TH day of AUGUST, 1971.

are Signed in my presence by the transferors

WHO IS PERSONALLY KNOWN TO ME

are Signed

Signed in my presence by the transferees

are WHO IS PERSONALLY KNOWN TO ME

† Accepted, and I hereby certify this Transfer to be correct for the purposes of the Real Property Act.

SOLICITOR FOR THE TRANSFEREES
WHOSE SIGNATURES CANNOT BE
OBTAINED WITHOUT DIFFICULTY
& DELAY

Transferee(s)

P. McClelland Solicitor Nelson Bay

* If signed by virtue of any power of attorney, the original power must be registered in the Miscellaneous Register, and produced with each dealing, and the memorandum of non-revocation on back of form signed by the attorney before a witness.

† N.B.—Section 117 requires that the above Certificate be signed by each Transferee or his Solicitor or Conveyancer, and renders any person falsely or negligently certifying liable to a penalty; also to damages recoverable by parties injured. Acceptance by the Solicitor or Conveyancer (who must sign his own name, and not that of his firm) is permitted only when the signature of the Transferee cannot be obtained without difficulty, and when the instrument does not impose a liability on the party taking under it. When the instrument contains some special covenant by the Transferee or is subject to a mortgage, encumbrance or lease, the Transferee must accept personally.

No alterations should be made by erasure. The words rejected should be scored through with the pen, and those substituted written over them, the alteration being verified by signature or initials in the margin, or noticed in the attestation.

N26949

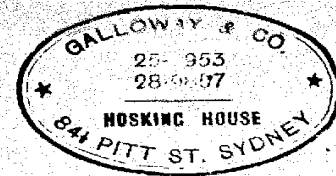
M 385445

Lodged by

Address:

Phone No.:

PARTIAL DISCHARGE OF MORTGAGE*
(N.B.—Before execution read marginal note)



I,

release and discharge the land comprised in the within transfer from such mortgage and all claims thereunder but without prejudice to my rights and remedies as regards the balance of the land comprised in such mortgage.

i This discharge is appropriate to a transfer of part of the land in the Mortgage. The mortgagee should execute a formal discharge where the land transferred is the whole of or the residue of the land in the Certificate of Title or Crown Grant or is the whole of the land in the mortgage.

Dated at this day of 19
Signed in my presence by

who is personally known to me.

Mortgagee.

MEMORANDUM AS TO NON-REVOCATION OF POWER OF ATTORNEY

(To be signed at the time of executing the within instrument)

Memorandum whereby the undersigned states that he has no notice of the revocation of the Power of Attorney registered No. Miscellaneous Register under the authority of which he has just executed the within transfer.

Signed at the day of 19
Signed in the presence of

j Strike out unnecessary words. Add any other matter necessary to show that the power is effective.

CERTIFICATE OF J.P., &c., TAKING DECLARATION OF ATTESTING WITNESS*

Appeared before me at , the day of , one thousand nine hundred and the attesting witness to this instrument and declared that he personally knew the person signing the same, and whose signature thereto he has attested; and that the name purporting to be such signature of the said is own handwriting, and that he was of sound mind and freely and voluntarily signed the same.

k To be signed by Registrar General, Deputy Registrar General, a Notary Public, J.P., Commissioner for Affidavits, or other functionary before whom the attesting witness appears. Not required if the instrument itself be signed or acknowledged before one of these parties.

INDEXED	MEMORANDUM OF TRANSFER	DOCUMENTS LODGED HEREWITH To be filled in by person lodging dealing
Checked by	Particulars entered in Register Book, 18-8-1971	1. <i>C/T</i> 2. <i>100 23/8</i> 3. 4. 5. 6. 7.
Passed (in S.D.B.) by		Received Docs Nos / Receiving Clerk <i>OK</i>
Signed by	<i>J. J. J.</i> Registrar General	

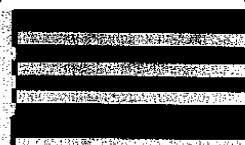
PROGRESS RECORD

	Initials	Date
Sent to Survey Branch		
Received from Records		
Draft written		
Draft examined		
Diagram prepared		
Diagram examined		
Draft forwarded		
Supt. of Engrossers		
Cancellation Clerk		
Vol.	Fol.	

1115 St 437-W

LEAVE THESE SPACES FOR DEPARTMENTAL USE

RP13



TRANSFER

Real Property Act, 1900



E
369865 X

Office of State Revenue use only

(A) **LAND TRANSFERRED**

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

(B) **LODGED BY**

L.T.O. Box

5689

Name, Address or DX and Telephone

T. J. JOHNSON & CO.
SOLICITORS
SUITE 2, 45 MOORE STREET,
LIVERPOOL, 2170

REFERENCE (m.p.) ~~600-7277~~ DX5046 Gericich^{SEA}

(C) **TRANSFEROR**

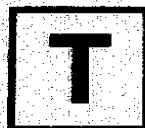
N

(D) acknowledges receipt of the consideration of \$198,000.00

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

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

(F) **TRANSFEE**



T of 2A Guthrie Avenue, Cremorne as to a 49/100 share,
of the same address as to a 49/100 share, as joint
tenants and M of 3 Edgecliff Esplanade, Seaforth as to
a 2/100 share
as joint tenants/tenants in common

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

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

J. M. Lawler

Signature of Witness

J. M. LAWLER

Name of Witness (BLOCK LETTERS)

5 NILLO ST LORN MAITLAND

Address of Witness

M. M. Bolton

Signature of Transferor

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

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Tino Di Bello

(Tino Di Bello)

Solicitor for -Signature of Transferee

Lodger Details

Lodger Code 505899
Name RAYMOND DAVID PERKES RAYMOND PERKES LAWYER
Address PO BOX 386 CROWS NEST 1585
Lodger Box 1W
Phone
Email
Reference GER0222

For Office Use Only

AR914506

NOTICE OF DEATH

Jurisdiction NEW SOUTH WALES

Privacy Collection Statement

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

Land Title Reference

15/A/5616

Deceased Joint Tenant

Given Name(s) KATHLEEN
Family Name GERGICH
Date of Death 2021-08-18
Pursuant to Death Certificate
Evidence No. 753463/2021

Surviving Joint Tenant

Given Name(s) THOMAS
Family Name GERGICH

The surviving joint tenant applies to be registered as proprietor of the Estate of the deceased joint tenant as specified in this Instrument.

APPLICANT EXECUTION

The Certifier has taken reasonable steps to verify the identity of the applicant or his, her or its administrator or attorney.
The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
The Certifier has retained the evidence supporting this Registry Instrument or Document.
The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of THOMAS GERGICH
Signer Name RAYMOND DAVID PERKES
Signer Organisation RAYMOND DAVID PERKES
Signer Role PRACTITIONER CERTIFIER
Execution Date 25/02/2022



FOLIO: 15/A/5616

SEARCH DATE	TIME	EDITION NO	DATE
11/7/2024	9:44 PM	4	28/3/2023

LAND

LOT 15 OF SECTION A IN DEPOSITED PLAN 5616
AT NELSONS BAY
LOCAL GOVERNMENT AREA PORT STEPHENS
PARISH OF TOMAREE COUNTY OF GLOUCESTER
TITLE DIAGRAM DP5616

FIRST SCHEDULE

MICHAEL GERGICH
IN 2/100 SHARE
MICHAEL GERGICH
MILLIE ANNE LULIC
AS JOINT TENANTS IN 98/100 SHARE
AS TENANTS IN COMMON (AE AS235176)

SECOND SCHEDULE (1 NOTIFICATION)

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

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

**PLANNING CERTIFICATE PURSUANT TO
SECTION 10.7 ENVIRONMENTAL PLANNING
AND ASSESSMENT ACT 1979**

APPLICANT DETAILS:

**MS D WILSON
15 CALLISTEMON Close
WARABROOK NSW 2304**

Reference: 227295.00

Issue Date: 05/07/2024

PROPERTY DESCRIPTION:

**42 Donald Street NELSON BAY NSW 2315 Parcel No: 20332
LOT: B DP: 417172**

Disclaimer

Information contained in this certificate relates only to the land for which this certificate is issued on the day it is issued. This information is provided in good faith and Council shall not incur any liability in respect of any such advice. Council relies on state agencies for advice and accordingly can only provide that information in accordance with the advice. Verification of the currency of agency advice should occur. For further information, please contact Council by telephoning (02) 4980 0255 or email plancert@portstephens.nsw.gov.au.

Title Information

Title information shown on this Planning Certificate is provided from Council's records and may not conform to information shown on the current Certificate of Title. Easements, restrictions as to user, rights of way and other similar information shown on the title of the land are not provided on this planning certificate.

Inspection of the land

The Council has made no inspection of the land for the purposes of this Planning Certificate.

PART A: INFORMATION PROVIDED UNDER SECTION 10.7(2)

Matters contained in this certificate apply only to the land on the date of issue.

1. Names of relevant planning instruments and development control plans

- (1) The name of each environmental planning instrument and development control plan that applies to the development on the land.

State Environmental Planning Policies

The relevant chapters of each State Environmental Planning Policy that apply to the land are listed below:

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
All chapters

State Environmental Planning Policy (Housing) 2021
All chapters

State Environmental Planning Policy (Sustainable Building) 2022
All chapters

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development
All chapters

State Environmental Planning Policy (Planning Systems) 2021
Chapter 2 State and regional development
Chapter 4 Concurrences and consents

State Environmental Planning Policy (Precincts - Regional) 2021
Chapter 2 State significant precincts

State Environmental Planning Policy (Primary Production) 2021
Chapter 2 Primary production and rural development

State Environmental Planning Policy (Resources and Energy) 2021
Chapter 2 Mining, petroleum production and extractive industries

State Environmental Planning Policy (Transport and Infrastructure) 2021
Chapter 2 Infrastructure
Chapter 3 Educational establishments and childcare facilities

State Environmental Planning Policy (Resilience and Hazards) 2021
Chapter 3 Hazardous and offensive development
Chapter 4 Remediation of land
Chapter 2 Coastal management 2018

State Environmental Planning Policy (Biodiversity and Conservation) 2021
Chapter 2 Vegetation in non-rural areas 2017

Chapter 4 Koala habitat protection 2021

Local Environmental Plan

Port Stephens Local Environmental Plan 2013

Development Control Plans

The name of each development control plan that applies to the carrying out of development on the land.

Port Stephens Development Control Plan 2014.

- (2) The name of each proposed environmental planning instrument and draft development control plan, which is or has been subject to community consultation or public exhibition under the Act, that will apply to the carrying out of development on the land (unless it has been more than 3 years since the end of the public exhibition period or if the Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved).

Draft State Environmental Planning Policies

No draft State Environmental Planning Policies affect the site the subject of this Certificate.

Draft Local Environmental Plan

Administrative Planning Proposal (PP-2023-2705)

Draft Development Control Plan

Development Control Plan 2014 - Chapter B1 Tree management and B2 Flora and Fauna

2. Zoning and land use under relevant planning instruments

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy).

a) The identity of the zone –

E1 Local Centre

The land is zoned E1 Local Centre under the provisions of Part 2 in the Port Stephens Local Environmental Plan 2013.

b) The purposes for which development in the zone –

ITEM 2 - May be carried out without development consent

Environmental Protection Works, Home occupations

ITEM 3 - May be carried out with development consent

Amusement centres, Attached dwellings, Boarding houses, Boat building and repair facilities, Boat launching ramps, Boat sheds, Car parks, Centre-based child care facilities, Charter and tourism boating facilities, Commercial premises, Community facilities, Electricity generating works, Entertainment facilities, Environmental facilities, Environmental protection works, Flood mitigation works, Function centres, Highway service centres, Home-based child care, Home businesses, Hostels, Hotel or motel accommodation, Industrial retail outlets, Information and education facilities, Jetties, Light industries, Local distribution premises, Marinas, Medical centres, Multi dwelling housing, Oyster aquaculture, Passenger transport facilities, Places of public worship, Public administration buildings, Recreation areas, Recreation facilities (indoor), Registered clubs,

Research stations, Residential flat buildings, Respite day care centres, Restricted premises, Roads, Service stations, Shop top housing, Signage, Tank-based aquaculture, Tourist and visitor accommodation, Vehicle body repair workshops, Vehicle repair stations, Veterinary hospitals, Water recreation structures, Water reticulation systems

ITEM 4 - Is prohibited

Farm stay accommodation, Any other development not specified in item 2 or 3

c) Additional permitted uses

No environmental planning instrument applies additional permitted use provisions to this land.

d) Development standards for the erection of a dwelling house

No development standard that fixes a minimum land dimension for the erection of a dwelling-house applies to the land.

e) Whether the land is an area of outstanding biodiversity value

No, the land is not identified in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*.

f) Whether the land is in a conservation area

The land is not located within a heritage conservation area under the Port Stephens Local Environmental Plan 2013.

g) Whether an item of environmental heritage is located on the land

The land is not identified as containing an item of environmental heritage significance under the provisions in Port Stephens Local Environmental Plan 2013.

3. Contributions Plans

(1) The name of each contributions plan applying to the land

Port Stephens Local Infrastructure Contributions Plan 2020

(2) The land is not in a special contributions area under the Act, Division 7.1.

Note. These documents specify development contributions required towards the cost of providing additional community services or facilities if a property is developed. They are available on request from Council or can be viewed www.portstephens.nsw.gov.au.

4. Complying Development

(1) Whether or not the land to which the certificate relates is land on which complying development may be carried out under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*?

Housing Code

Complying development under the General Housing Code MAY be carried out on the land.

Inland Code

Complying development under the Inland Code MAY be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code MAY be carried out on the land.

Low Rise Housing Diversity Code

Complying development under the Low Rise Medium Density Housing Code MAY be carried out on the land.

Greenfield Housing Code

Complying development under the Greenfield Housing Code MAY be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code MAY be carried out on the land.

General Development Code

Complying development under the General Development Code MAY be carried out on the land.

Industrial and Business Alterations Code

Complying development under the Commercial and Industrial alterations Code MAY be carried out on the land.

Industrial and Business Buildings Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code MAY be carried out on the land.

Container Recycling Facilities Code

Complying development under the Container Recycling Facilities code MAY be carried out on the land.

Subdivisions Code

Complying development under the Subdivision Code MAY be carried out on the land.

Demolition Code

Complying development under the Demolition Code MAY be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code MAY be carried out on the land.

(2) If complying development may not be carried on the land under the above codes, it is because of the provisions of Clauses 1.17A(1)(c) to (e), (2), (3), or (4), 1.18(1)(c3) or 1.19 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Council does not have sufficient information to ascertain the reason why complying development may not be carried out under the Policy. Contact Councils duty officer on (02) 4988 0255 for any enquiries relating to the reason why complying development may not be carried out on the land.

(3) If the land is a lot to which the Housing Code, Rural Housing Code, Low Rise Medium Density Housing Code, Greenfield Housing Code, Housing Alterations Code, General

Development Code, or Commercial and Industrial (New Buildings and Additions) Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* applies, complying development may be carried out on any part of the lot that is not affected by the provisions of clauses 1.17A(1)(c) to (e), (2), (3) or (4), 1.18(1)(c3) or 1.19 of that Policy.

- (4) There are no variations to the exempt development codes under clause 1.12 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* in relation to the land.

5. Exempt development

- (1) Whether the land is on land which exempt development may be carried out under each of the exempt development codes under the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Division 1 General Code

Exempt development under the General Exempt Development Code MAY be carried out on the land.

Division 2 Advertising and Signage Code

Exempt development under the Advertising and Signage Code MAY be carried out on the land.

Division 3 Temporary Uses and Structures Code

Exempt development under the Temporary Uses and Structures Code MAY be carried out on the land.

Note: Clause 1.16(1)(c) specifies that exempt development must not be carried out on land that is, or on which there is, an item that is listed on the State Heritage Register under the *Heritage Act 1977*, or that is subject to an interim heritage order under that Act
Council does not have sufficient information to ascertain whether the land is listed on the State Heritage Register under the *Heritage Act 1977*, or subject to an interim heritage order under that Act.

Note: If the land is a lot to which the General Code, Advertising and Signage Code, and Temporary Uses Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*) applies, exempt development may be carried out on any part of the lot that is not affected by the provisions of clause 1.16(1)(b1)–(d) or 1.16A of that Policy.

6. Affected building notices and building product rectification orders

- (1) Whether or not the council is aware that –

- a) There is any affected building notice in force in relation to the land

There is no affected building notice in force in respect of the land.

- b) A building product rectification order is in force in relation to the land that has not been fully complied with

No

- c) Any notice of intention to make a building product rectification order has been given in respect of the land and is outstanding.

No

Note: In this section, *affected building notice* has the same meaning as in the *Building Products (Safety) Act 2017*, Part 4. *Building product rectification order* has the same meaning as in the *Building Products (Safety) Act 2017*.

7. Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in Section 3.15 of the *Environmental Planning and Assessment Act 1979 (the Act)*.

The Port Stephens Local Environmental Plan 2013 DOES NOT provide for the acquisition of this land, or part thereof, by a public authority as referred to in Section 3.15 of the Act.

8. Road widening and road realignment

Council's records indicate that the land the subject of this Certificate is not affected by any road widening or road realignment under:- (a) Section 25 of the Roads Act 1993; or (b) any environmental planning instrument; or (c) any resolution of the council.

9. Flood related development controls information

No part of the land is within the flood planning area, or between the flood planning area and the probable maximum flood, and therefore IS NOT subject to flood related development controls.

10. Council and other public authority policies on hazard risk restrictions

Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk (other than flooding or bushfire).

Council HAS NOT adopted a policy or been notified of any adopted policy of another public authority, that restricts development on the land because of the likelihood of landslip, tidal inundation, subsidence, contamination, salinity, coastal hazards or sea level rise.

Council DOES HAVE adopted policies or has been notified of adopted policies of another public authority on matters relating to the risk of acid sulfate soils and aircraft noise.

The information below identifies any adopted policies that apply to the land:

Clause 7.1 Acid Sulfate Soils of the Port Stephens Local Environmental Plan 2013 applies to the land. Acid sulfate soil mapping can be viewed on the NSW Department of Planning and Environment Spatial Viewer.

NOTE: The absence of a council policy restricting the development of the land by reason of a particular natural hazard does not mean that the risk from that hazard is non-existent.

11. Bush fire prone land

Whether or not some, all, or none of the land is bush fire prone land.

No, the land is not shown as bush fire prone in Council's records.

12. Loose-fill asbestos insulation

Whether or not the land includes any residential premises (as defined in Division 1A of Part 8 of the *Home Building Act 1989*) that are listed on a register of residential premises that contain or have contained loose-fill asbestos insulation.

No, the land does not include any residential dwelling identified on the Loose-Fill Asbestos Insulation Register as containing loose-fill asbestos ceiling insulation. For further information, please contact Department of Fair Trading by telephoning 13 77 88 or go to their website at www.fairtrading.nsw.gov.au.

13. Mine Subsidence

Whether or not the land is proclaimed to be a mine subsidence district, within the meaning of the the *Coal Mine Subsidence Compensation Act 2017*.

No, the land is not within a proclaimed or declared mine subsidence district.

14. Paper subdivision information

- (1) The name of any development plan adopted by a relevant authority that applies to the land or is proposed to be subject to a consent ballot.
- (2) The date of any subdivision order that applies to the land

Not applicable.

15. Property vegetation plans

If the land is land in relation to which a property vegetation plan is approved under Part 4 of the *Native Vegetation Act 2003*, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

No, Council has not been notified of any property vegetation plans under the Native Vegetation Act 2003 that affect the land to which this certificate applies.

16. Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect ,but only if the council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

No, Council has not been notified that the land is a biodiversity stewardship site.

Note. Biodiversity stewardship agreements include biobanking agreements under the *Threatened Species Conservation Act 1995*, Part 7A that are taken to be biodiversity stewardship agreements under the *Biodiversity Conservation Act 2016*, Part 5.

17. Biodiversity certified land

If the land is biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

No, Council has not been notified that the land is biodiversity certified land.

Note. Biodiversity certified land includes land certified under the *Threatened Species Conservation Act 1995*, Part 7AA that is taken to be certified under the *Biodiversity Conservation Act 2016*, Part 8.

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

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).

The land is NOT affected by an order under the *Trees (Dispute Between Neighbours) Act 2006* (of which Council is aware).

19. Annual charges under *Local Government Act 1993* for coastal protection services that relate to existing coastal protection works

If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

No, the land is not subject to annual charges under section 496B of the *Local Government Act 1993* for coastal protection services relating to existing coastal protection works to which the owner (or any previous owner) of the land has consented.

Note. "existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the *Local Government Act 1993*.

20. Western Sydney Aerotropolis

Not applicable to the Port Stephens Local Government Area.

21. Development consent conditions for seniors housing

If *State Environmental Planning Policy (Housing) 2021*, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

Council is unable to provide site-specific information on any conditions of a development consent granted after 11 October 2007 in relation to Clause 88(2) of the *State Environmental Planning Policy (Housing) 2021*, that may apply to the land.

22. Site compatibility certificates and development consent conditions for affordable rental housing

(1) Whether there is a current site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate (of which Council is aware) in relation to proposed development on the land.

Council is not aware of a current site compatibility certificate issued under *State Environmental Planning Policy (Housing) 2021*.

- (2) If *State Environmental Planning Policy (Housing) 2021*, Chapter 2, Part 2, Division 1 or 5 applies to the land, a statement setting out terms of a kind referred to in the Policy, clause 21(1) or 40(1).

The land is not affected by any terms of a kind (of which Council is aware) referred to in Chapter 2, Part 2, Division 1 or clause 21(1) or 40(1) of *State Environmental Planning Policy (Housing) 2021* in respect of development on the land.

23. Water or sewerage services

If water or sewerage services are, or are to be, provided to the land under the *Water Industry Competition Act 2006*.

No, Council is not aware that water or sewerage services are, or are to be, provided under the *Water Industry Competition Act 2006*.

Additional matters

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

- (a) Whether or not the land to which the certificate relates is significantly contaminated land within the meaning of that Act.
- (b) Whether or not the land to which the certificate relates is subject to a management order within the meaning of that Act.
- (c) Whether or not the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of the Act.
- (d) Whether or not the land to which this certificate relates is subject to an ongoing maintenance order within the meaning of that Act.
- (e) Whether or not the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such statement has been provided at any time to the local authority issuing the certificate.

There are no prescribed matters under section 59(2) of the Contaminated Land Management Act 1997 to be disclosed.

PART B: INFORMATION PROVIDED UNDER SECTION 10.7(5)

This information is provided in accordance with section 10.7(5) of the *Environmental Planning and Assessment Act 1979*. Section 10.7(6) states that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5) of the Act. If this information is to be relied upon, it should be independently checked.

Heritage

Port Stephens Council must take into consideration the likely effect of proposed development on the heritage significance of a heritage item, heritage conservation area, archaeological site or potential archaeological site, and on its setting, when determining an application for consent to carry out development on land in its vicinity. Please contact Council's Development Assessment and Compliance Section by telephoning 49880255.

Aboriginal Archaeology

When determining a development application on known or potential archaeological sites of both Aboriginal and non-Aboriginal heritage significance, Port Stephens Council must consider an assessment of how the proposed development would affect the conservation of the site and any relic known or reasonably likely to be located at the site. Please contact Council's Development Assessment and Compliance Section on 49880255 for more information.

Aircraft Noise

All areas of the Port Stephens Local Government area may be affected by aircraft noise from time to time. RAAF Base Williamtown – Newcastle Airport and Salt Ash Air Weapons Range are located within the Port Stephens Local Government Area. Further information can be obtained from the Commonwealth Department of Defence website and from the Port Stephens Council Strategy and Environment Section and you are advised to make further enquiries.

Koala Habitat

Parts of the Port Stephens Local government Area are affected by Koala Habitat and subject to the Port Stephens Comprehensive Koala Plan of Management 2002 made under State Environmental Planning Proposal No. 44. Further information can be obtained from Council's Strategy & Environment Section on 49880326 or email plancert@portstephens.nsw.gov.au.

Invasive Species

Parts of the Port Stephens Local Government Area contain plants that pose a risk according to the *Biosecurity Act 2015* which may restrict the use of the land. For further information please contact Council's Strategy & Environment Section on 4988 0326 or email weeds@portstephens.nsw.gov.au

Development consents relating to the land

Please contact Customer Relations on (02) 4988 0255, for any enquiries regarding development consent over the land in the past 5 years.

Issued by Port Stephens Council Development Services Group,
on behalf of **Tim Crosdale, General Manager**

**PLANNING CERTIFICATE PURSUANT TO
SECTION 10.7 ENVIRONMENTAL PLANNING
AND ASSESSMENT ACT 1979**

APPLICANT DETAILS:

**MS D WILSON
15 CALLISTEMON Close
WARABROOK NSW 2304**

Reference: 227295.00

Issue Date: 05/07/2024

PROPERTY DESCRIPTION:

**5 Church Street NELSON BAY NSW 2315 Parcel No: 5024
LOT: 15 SEC: A DP: 5616**

Disclaimer

Information contained in this certificate relates only to the land for which this certificate is issued on the day it is issued. This information is provided in good faith and Council shall not incur any liability in respect of any such advice. Council relies on state agencies for advice and accordingly can only provide that information in accordance with the advice. Verification of the currency of agency advice should occur. For further information, please contact Council by telephoning (02) 4980 0255 or email plancert@portstephens.nsw.gov.au.

Title Information

Title information shown on this Planning Certificate is provided from Council's records and may not conform to information shown on the current Certificate of Title. Easements, restrictions as to user, rights of way and other similar information shown on the title of the land are not provided on this planning certificate.

Inspection of the land

The Council has made no inspection of the land for the purposes of this Planning Certificate.

PART A: INFORMATION PROVIDED UNDER SECTION 10.7(2)

Matters contained in this certificate apply only to the land on the date of issue.

1. Names of relevant planning instruments and development control plans

- (1) The name of each environmental planning instrument and development control plan that applies to the development on the land.

State Environmental Planning Policies

The relevant chapters of each State Environmental Planning Policy that apply to the land are listed below:

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
All chapters

State Environmental Planning Policy (Housing) 2021
All chapters

State Environmental Planning Policy (Sustainable Building) 2022
All chapters

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development
All chapters

State Environmental Planning Policy (Planning Systems) 2021
Chapter 2 State and regional development
Chapter 4 Concurrences and consents

State Environmental Planning Policy (Precincts - Regional) 2021
Chapter 2 State significant precincts

State Environmental Planning Policy (Primary Production) 2021
Chapter 2 Primary production and rural development

State Environmental Planning Policy (Resources and Energy) 2021
Chapter 2 Mining, petroleum production and extractive industries

State Environmental Planning Policy (Transport and Infrastructure) 2021
Chapter 2 Infrastructure
Chapter 3 Educational establishments and childcare facilities

State Environmental Planning Policy (Resilience and Hazards) 2021
Chapter 3 Hazardous and offensive development
Chapter 4 Remediation of land
Chapter 2 Coastal management 2018

State Environmental Planning Policy (Biodiversity and Conservation) 2021
Chapter 2 Vegetation in non-rural areas 2017

Chapter 4 Koala habitat protection 2021

Local Environmental Plan

Port Stephens Local Environmental Plan 2013

Development Control Plans

The name of each development control plan that applies to the carrying out of development on the land.

Port Stephens Development Control Plan 2014.

- (2) The name of each proposed environmental planning instrument and draft development control plan, which is or has been subject to community consultation or public exhibition under the Act, that will apply to the carrying out of development on the land (unless it has been more than 3 years since the end of the public exhibition period or if the Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved).

Draft State Environmental Planning Policies

No draft State Environmental Planning Policies affect the site the subject of this Certificate.

Draft Local Environmental Plan

Administrative Planning Proposal (PP-2023-2705)

Draft Development Control Plan

Development Control Plan 2014 - Chapter B1 Tree management and B2 Flora and Fauna

2. Zoning and land use under relevant planning instruments

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy).

a) The identity of the zone –

R3 Medium Density Residential

The land is zoned R3 Medium Density Residential under the provisions of Part 2 in the Port Stephens Local Environmental Plan 2013.

b) The purposes for which development in the zone –

ITEM 2 - May be carried out without development consent

Home occupations

ITEM 3 - May be carried out with development consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs, Centre-based child care facilities; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Serviced apartments; Seniors housing; Tank-based aquaculture; Water reticulation systems

ITEM 4 - Is prohibited

Pond-based aquaculture; Any development not specified in item 2 or 3

c) Additional permitted uses

No environmental planning instrument applies additional permitted use provisions to this land.

d) Development standards for the erection of a dwelling house

No development standard that fixes a minimum land dimension for the erection of a dwelling-house applies to the land.

e) Whether the land is an area of outstanding biodiversity value

No, the land is not identified in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*.

f) Whether the land is in a conservation area

The land is not located within a heritage conservation area under the Port Stephens Local Environmental Plan 2013.

g) Whether an item of environmental heritage is located on the land

The land is not identified as containing an item of environmental heritage significance under the provisions in Port Stephens Local Environmental Plan 2013.

3. Contributions Plans

(1) The name of each contributions plan applying to the land

Port Stephens Local Infrastructure Contributions Plan 2020

(2) The land is not in a special contributions area under the Act, Division 7.1.

Note. These documents specify development contributions required towards the cost of providing additional community services or facilities if a property is developed. They are available on request from Council or can be viewed www.portstephens.nsw.gov.au.

4. Complying Development

(1) Whether or not the land to which the certificate relates is land on which complying development may be carried out under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*?

Housing Code

Complying development under the General Housing Code MAY be carried out on the land.

Inland Code

Complying development under the Inland Code MAY be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code MAY be carried out on the land.

Low Rise Housing Diversity Code

Complying development under the Low Rise Medium Density Housing Code MAY be carried out on the land.

Greenfield Housing Code

Complying development under the Greenfield Housing Code MAY be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code MAY be carried out on the land.

General Development Code

Complying development under the General Development Code MAY be carried out on the land.

Industrial and Business Alterations Code

Complying development under the Commercial and Industrial alterations Code MAY be carried out on the land.

Industrial and Business Buildings Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code MAY be carried out on the land.

Container Recycling Facilities Code

Complying development under the Container Recycling Facilities code MAY be carried out on the land.

Subdivisions Code

Complying development under the Subdivision Code MAY be carried out on the land.

Demolition Code

Complying development under the Demolition Code MAY be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code MAY be carried out on the land.

(2) If complying development may not be carried on the land under the above codes, it is because of the provisions of Clauses 1.17A(1)(c) to (e), (2), (3), or (4), 1.18(1)(c3) or 1.19 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Council does not have sufficient information to ascertain the reason why complying development may not be carried out under the Policy. Contact Council's duty officer on (02) 4988 0255 for any enquiries relating to the reason why complying development may not be carried out on the land.

(3) If the land is a lot to which the Housing Code, Rural Housing Code, Low Rise Medium Density Housing Code, Greenfield Housing Code, Housing Alterations Code, General Development Code, or Commercial and Industrial (New Buildings and Additions) Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*) applies, complying development may be carried out on any part of the lot that is not affected by the provisions of clauses 1.17A(1)(c) to (e), (2), (3) or (4), 1.18(1)(c3) or 1.19 of that Policy.

- (4) There are no variations to the exempt development codes under clause 1.12 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* in relation to the land.

5. Exempt development

- (1) Whether the land is on land which exempt development may be carried out under each of the exempt development codes under the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Division 1 General Code

Exempt development under the General Exempt Development Code MAY be carried out on the land.

Division 2 Advertising and Signage Code

Exempt development under the Advertising and Signage Code MAY be carried out on the land.

Division 3 Temporary Uses and Structures Code

Exempt development under the Temporary Uses and Structures Code MAY be carried out on the land.

Note: Clause 1.16(1)(c) specifies that exempt development must not be carried out on land that is, or on which there is, an item that is listed on the State Heritage Register under the *Heritage Act 1977*, or that is subject to an interim heritage order under that Act. Council does not have sufficient information to ascertain whether the land is listed on the State Heritage Register under the *Heritage Act 1977*, or subject to an interim heritage order under that Act.

Note: If the land is a lot to which the General Code, Advertising and Signage Code, and Temporary Uses Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*) applies, exempt development may be carried out on any part of the lot that is not affected by the provisions of clause 1.16(1)(b1)–(d) or 1.16A of that Policy.

6. Affected building notices and building product rectification orders

- (1) Whether or not the council is aware that –

- a) There is any affected building notice in force in relation to the land

There is no affected building notice in force in respect of the land.

- b) A building product rectification order is in force in relation to the land that has not been fully complied with

No

- c) Any notice of intention to make a building product rectification order has been given in respect of the land and is outstanding.

No

Note: In this section, *affected building notice* has the same meaning as in the *Building*

Products (Safety) Act 2017, Part 4. Building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

7. Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in Section 3.15 of the *Environmental Planning and Assessment Act 1979 (the Act)*.

The Port Stephens Local Environmental Plan 2013 DOES NOT provide for the acquisition of this land, or part thereof, by a public authority as referred to in Section 3.15 of the Act.

8. Road widening and road realignment

Council's records indicate that the land the subject of this Certificate is not affected by any road widening or road realignment under:- (a) Section 25 of the Roads Act 1993; or (b) any environmental planning instrument; or (c) any resolution of the council.

9. Flood related development controls information

No part of the land is within the flood planning area, or between the flood planning area and the probable maximum flood, and therefore IS NOT subject to flood related development controls.

10. Council and other public authority policies on hazard risk restrictions

Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk (other than flooding or bushfire).

Council HAS NOT adopted a policy or been notified of any adopted policy of another public authority, that restricts development on the land because of the likelihood of landslip, tidal inundation, subsidence, contamination, salinity, coastal hazards or sea level rise.

Council DOES HAVE adopted policies or has been notified of adopted policies of another public authority on matters relating to the risk of acid sulfate soils and aircraft noise.

The information below identifies any adopted policies that apply to the land:

Clause 7.1 Acid Sulfate Soils of the Port Stephens Local Environmental Plan 2013 applies to the land. Acid sulfate soil mapping can be viewed on the NSW Department of Planning and Environment Spatial Viewer.

NOTE: The absence of a council policy restricting the development of the land by reason of a particular natural hazard does not mean that the risk from that hazard is non-existent.

11. Bush fire prone land

Whether or not some, all, or none of the land is bush fire prone land.

No, the land is not shown as bush fire prone in Council's records.

12. Loose-fill asbestos insulation

Whether or not the land includes any residential premises (as defined in Division 1A of Part 8 of the *Home Building Act 1989*) that are listed on a register of residential premises that contain or have contained loose-fill asbestos insulation.

No, the land does not include any residential dwelling identified on the Loose-Fill Asbestos Insulation Register as containing loose-fill asbestos ceiling insulation. For further information, please contact Department of Fair Trading by telephoning 13 77 88 or go to their website at www.fairtrading.nsw.gov.au.

13. Mine Subsidence

Whether or not the land is proclaimed to be a mine subsidence district, within the meaning of the the *Coal Mine Subsidence Compensation Act 2017*.

No, the land is not within a proclaimed or declared mine subsidence district.

14. Paper subdivision information

- (1) The name of any development plan adopted by a relevant authority that applies to the land or is proposed to be subject to a consent ballot.
- (2) The date of any subdivision order that applies to the land

Not applicable.

15. Property vegetation plans

If the land is land in relation to which a property vegetation plan is approved under Part 4 of the *Native Vegetation Act 2003*, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

No, Council has not been notified of any property vegetation plans under the Native Vegetation Act 2003 that affect the land to which this certificate applies.

16. Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect ,but only if the council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

No, Council has not been notified that the land is a biodiversity stewardship site.

Note. Biodiversity stewardship agreements include biobanking agreements under the *Threatened Species Conservation Act 1995*, Part 7A that are taken to be biodiversity stewardship agreements under the *Biodiversity Conservation Act 2016*, Part 5.

17. Biodiversity certified land

If the land is biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

No, Council has not been notified that the land is biodiversity certified land.

Note. Biodiversity certified land includes land certified under the *Threatened Species Conservation Act 1995*, Part 7AA that is taken to be certified under the *Biodiversity Conservation Act 2016*, Part 8.

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

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).

The land is NOT affected by an order under the *Trees (Dispute Between Neighbours) Act 2006* (of which Council is aware).

19. Annual charges under *Local Government Act 1993* for coastal protection services that relate to existing coastal protection works

If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

No, the land is not subject to annual charges under section 496B of the *Local Government Act 1993* for coastal protection services relating to existing coastal protection works to which the owner (or any previous owner) of the land has consented.

Note. "existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the *Local Government Act 1993*.

20. Western Sydney Aerotropolis

Not applicable to the Port Stephens Local Government Area.

21. Development consent conditions for seniors housing

If *State Environmental Planning Policy (Housing) 2021*, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

Council is unable to provide site-specific information on any conditions of a development consent granted after 11 October 2007 in relation to Clause 88(2) of the *State Environmental Planning Policy (Housing) 2021*, that may apply to the land.

22. Site compatibility certificates and development consent conditions for affordable rental housing

(1) Whether there is a current site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate (of which Council is aware) in relation to proposed development on the land.

Council is not aware of a current site compatibility certificate issued under *State Environmental Planning Policy (Housing) 2021*.

(2) If *State Environmental Planning Policy (Housing) 2021*, Chapter 2, Part 2, Division 1 or 5 applies to the land, a statement setting out terms of a kind referred to in the Policy, clause 21(1) or 40(1).

The land is not affected by any terms of a kind (of which Council is aware) referred to in Chapter 2, Part 2, Division 1 or clause 21(1) or 40(1) of *State Environmental Planning Policy (Housing) 2021* in respect of development on the land.

23. Water or sewerage services

If water or sewerage services are, or are to be, provided to the land under the *Water Industry Competition Act 2006*.

No, Council is not aware that water or sewerage services are, or are to be, provided under the *Water Industry Competition Act 2006*.

Additional matters

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

- (a) Whether or not the land to which the certificate relates is significantly contaminated land within the meaning of that Act.
- (b) Whether or not the land to which the certificate relates is subject to a management order within the meaning of that Act.
- (c) Whether or not the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of the Act.
- (d) Whether or not the land to which this certificate relates is subject to an ongoing maintenance order within the meaning of that Act.
- (e) Whether or not the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such statement has been provided at any time to the local authority issuing the certificate.

There are no prescribed matters under section 59(2) of the Contaminated Land Management Act 1997 to be disclosed.

PART B: INFORMATION PROVIDED UNDER SECTION 10.7(5)

This information is provided in accordance with section 10.7(5) of the *Environmental Planning and Assessment Act 1979*. Section 10.7(6) states that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5) of the Act. If this information is to be relied upon, it should be independently checked.

Heritage

Port Stephens Council must take into consideration the likely effect of proposed development on the heritage significance of a heritage item, heritage conservation area, archaeological site or potential archaeological site, and on its setting, when determining an application for consent to carry out development on land in its vicinity. Please contact Council's Development Assessment and Compliance Section by telephoning 49880255.

Aboriginal Archaeology

When determining a development application on known or potential archaeological sites of both Aboriginal and non-Aboriginal heritage significance, Port Stephens Council must consider an assessment of how the proposed development would affect the conservation of the site and any relic known or reasonably likely to be located at the site. Please contact Council's Development Assessment and Compliance Section on 49880255 for more information.

Aircraft Noise

All areas of the Port Stephens Local Government area may be affected by aircraft noise from time to time. RAAF Base Williamtown – Newcastle Airport and Salt Ash Air Weapons Range are located within the Port Stephens Local Government Area. Further information can be obtained from the Commonwealth Department of Defence website and from the Port Stephens Council Strategy and Environment Section and you are advised to make further enquiries.

Koala Habitat

Parts of the Port Stephens Local government Area are affected by Koala Habitat and subject to the Port Stephens Comprehensive Koala Plan of Management 2002 made under State Environmental Planning Proposal No. 44. Further information can be obtained from Council's Strategy & Environment Section on 49880326 or email plancert@portstephens.nsw.gov.au.

Invasive Species

Parts of the Port Stephens Local Government Area contain plants that pose a risk according to the *Biosecurity Act 2015* which may restrict the use of the land. For further information please contact Council's Strategy & Environment Section on 4988 0326 or email weeds@portstephens.nsw.gov.au

Development consents relating to the land

Please contact Customer Relations on (02) 4988 0255, for any enquiries regarding development consent over the land in the past 5 years.

Issued by Port Stephens Council Development Services Group,
on behalf of **Tim Crosdale, General Manager**

**PLANNING CERTIFICATE PURSUANT TO
SECTION 10.7 ENVIRONMENTAL PLANNING
AND ASSESSMENT ACT 1979**

APPLICANT DETAILS:

**MS D WILSON
15 CALLISTEMON Close
WARABROOK NSW 2304**

Reference: 227295.00

Issue Date: 05/07/2024

PROPERTY DESCRIPTION:

**7 Church Street NELSON BAY NSW 2315 Parcel No: 5027
LOT: A DP: 417172**

Disclaimer

Information contained in this certificate relates only to the land for which this certificate is issued on the day it is issued. This information is provided in good faith and Council shall not incur any liability in respect of any such advice. Council relies on state agencies for advice and accordingly can only provide that information in accordance with the advice. Verification of the currency of agency advice should occur. For further information, please contact Council by telephoning (02) 4980 0255 or email plancert@portstephens.nsw.gov.au.

Title Information

Title information shown on this Planning Certificate is provided from Council's records and may not conform to information shown on the current Certificate of Title. Easements, restrictions as to user, rights of way and other similar information shown on the title of the land are not provided on this planning certificate.

Inspection of the land

The Council has made no inspection of the land for the purposes of this Planning Certificate.

PART A: INFORMATION PROVIDED UNDER SECTION 10.7(2)

Matters contained in this certificate apply only to the land on the date of issue.

1. Names of relevant planning instruments and development control plans

- (1) The name of each environmental planning instrument and development control plan that applies to the development on the land.

State Environmental Planning Policies

The relevant chapters of each State Environmental Planning Policy that apply to the land are listed below:

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
All chapters

State Environmental Planning Policy (Housing) 2021
All chapters

State Environmental Planning Policy (Sustainable Building) 2022
All chapters

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development
All chapters

State Environmental Planning Policy (Planning Systems) 2021
Chapter 2 State and regional development
Chapter 4 Concurrences and consents

State Environmental Planning Policy (Precincts - Regional) 2021
Chapter 2 State significant precincts

State Environmental Planning Policy (Primary Production) 2021
Chapter 2 Primary production and rural development

State Environmental Planning Policy (Resources and Energy) 2021
Chapter 2 Mining, petroleum production and extractive industries

State Environmental Planning Policy (Transport and Infrastructure) 2021
Chapter 2 Infrastructure
Chapter 3 Educational establishments and childcare facilities

State Environmental Planning Policy (Resilience and Hazards) 2021
Chapter 3 Hazardous and offensive development
Chapter 4 Remediation of land
Chapter 2 Coastal management 2018

State Environmental Planning Policy (Biodiversity and Conservation) 2021
Chapter 2 Vegetation in non-rural areas 2017

Chapter 4 Koala habitat protection 2021

Local Environmental Plan

Port Stephens Local Environmental Plan 2013

Development Control Plans

The name of each development control plan that applies to the carrying out of development on the land.

Port Stephens Development Control Plan 2014.

- (2) The name of each proposed environmental planning instrument and draft development control plan, which is or has been subject to community consultation or public exhibition under the Act, that will apply to the carrying out of development on the land (unless it has been more than 3 years since the end of the public exhibition period or if the Secretary has notified the council that the making of the proposed instrument has been deferred indefinitely or has not been approved).

Draft State Environmental Planning Policies

No draft State Environmental Planning Policies affect the site the subject of this Certificate.

Draft Local Environmental Plan

Administrative Planning Proposal (PP-2023-2705)

Draft Development Control Plan

Development Control Plan 2014 - Chapter B1 Tree management and B2 Flora and Fauna

2. Zoning and land use under relevant planning instruments

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policy).

a) The identity of the zone –

R3 Medium Density Residential

The land is zoned R3 Medium Density Residential under the provisions of Part 2 in the Port Stephens Local Environmental Plan 2013.

b) The purposes for which development in the zone –

ITEM 2 - May be carried out without development consent

Home occupations

ITEM 3 - May be carried out with development consent

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs, Centre-based child care facilities; Community facilities; Dual occupancies; Dwelling houses; Emergency services facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Group homes; Home-based child care; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Semi-detached dwellings; Serviced apartments; Seniors housing; Tank-based aquaculture; Water reticulation systems

ITEM 4 - Is prohibited

Pond-based aquaculture; Any development not specified in item 2 or 3

c) Additional permitted uses

No environmental planning instrument applies additional permitted use provisions to this land.

d) Development standards for the erection of a dwelling house

No development standard that fixes a minimum land dimension for the erection of a dwelling-house applies to the land.

e) Whether the land is an area of outstanding biodiversity value

No, the land is not identified in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*.

f) Whether the land is in a conservation area

The land is not located within a heritage conservation area under the Port Stephens Local Environmental Plan 2013.

g) Whether an item of environmental heritage is located on the land

The land is not identified as containing an item of environmental heritage significance under the provisions in Port Stephens Local Environmental Plan 2013.

3. Contributions Plans

(1) The name of each contributions plan applying to the land

Port Stephens Local Infrastructure Contributions Plan 2020

(2) The land is not in a special contributions area under the Act, Division 7.1.

Note. These documents specify development contributions required towards the cost of providing additional community services or facilities if a property is developed. They are available on request from Council or can be viewed www.portstephens.nsw.gov.au.

4. Complying Development

(1) Whether or not the land to which the certificate relates is land on which complying development may be carried out under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*?

Housing Code

Complying development under the General Housing Code MAY be carried out on the land.

Inland Code

Complying development under the Inland Code MAY be carried out on the land.

Rural Housing Code

Complying development under the Rural Housing Code MAY be carried out on the land.

Low Rise Housing Diversity Code

Complying development under the Low Rise Medium Density Housing Code MAY be carried out on the land.

Greenfield Housing Code

Complying development under the Greenfield Housing Code MAY be carried out on the land.

Housing Alterations Code

Complying development under the Housing Alterations Code MAY be carried out on the land.

General Development Code

Complying development under the General Development Code MAY be carried out on the land.

Industrial and Business Alterations Code

Complying development under the Commercial and Industrial alterations Code MAY be carried out on the land.

Industrial and Business Buildings Code

Complying development under the Commercial and Industrial (New Buildings and Additions) Code MAY be carried out on the land.

Container Recycling Facilities Code

Complying development under the Container Recycling Facilities code MAY be carried out on the land.

Subdivisions Code

Complying development under the Subdivision Code MAY be carried out on the land.

Demolition Code

Complying development under the Demolition Code MAY be carried out on the land.

Fire Safety Code

Complying development under the Fire Safety Code MAY be carried out on the land.

(2) If complying development may not be carried on the land under the above codes, it is because of the provisions of Clauses 1.17A(1)(c) to (e), (2), (3), or (4), 1.18(1)(c3) or 1.19 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Council does not have sufficient information to ascertain the reason why complying development may not be carried out under the Policy. Contact Council's duty officer on (02) 4988 0255 for any enquiries relating to the reason why complying development may not be carried out on the land.

(3) If the land is a lot to which the Housing Code, Rural Housing Code, Low Rise Medium Density Housing Code, Greenfield Housing Code, Housing Alterations Code, General Development Code, or Commercial and Industrial (New Buildings and Additions) Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*) applies, complying development may be carried out on any part of the lot that is not affected by the provisions of clauses 1.17A(1)(c) to (e), (2), (3) or (4), 1.18(1)(c3) or 1.19 of that Policy.

- (4) There are no variations to the exempt development codes under clause 1.12 of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* in relation to the land.

5. Exempt development

- (1) Whether the land is on land which exempt development may be carried out under each of the exempt development codes under the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

Division 1 General Code

Exempt development under the General Exempt Development Code MAY be carried out on the land.

Division 2 Advertising and Signage Code

Exempt development under the Advertising and Signage Code MAY be carried out on the land.

Division 3 Temporary Uses and Structures Code

Exempt development under the Temporary Uses and Structures Code MAY be carried out on the land.

Note: Clause 1.16(1)(c) specifies that exempt development must not be carried out on land that is, or on which there is, an item that is listed on the State Heritage Register under the *Heritage Act 1977*, or that is subject to an interim heritage order under that Act. Council does not have sufficient information to ascertain whether the land is listed on the State Heritage Register under the *Heritage Act 1977*, or subject to an interim heritage order under that Act.

Note: If the land is a lot to which the General Code, Advertising and Signage Code, and Temporary Uses Code (within the meaning of the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*) applies, exempt development may be carried out on any part of the lot that is not affected by the provisions of clause 1.16(1)(b1)–(d) or 1.16A of that Policy.

6. Affected building notices and building product rectification orders

- (1) Whether or not the council is aware that –

- a) There is any affected building notice in force in relation to the land

There is no affected building notice in force in respect of the land.

- b) A building product rectification order is in force in relation to the land that has not been fully complied with

No

- c) Any notice of intention to make a building product rectification order has been given in respect of the land and is outstanding.

No

Note: In this section, *affected building notice* has the same meaning as in the *Building*

Products (Safety) Act 2017, Part 4. Building product rectification order has the same meaning as in the Building Products (Safety) Act 2017.

7. Land reserved for acquisition

Whether or not any environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in Section 3.15 of the *Environmental Planning and Assessment Act 1979 (the Act)*.

The Port Stephens Local Environmental Plan 2013 DOES NOT provide for the acquisition of this land, or part thereof, by a public authority as referred to in Section 3.15 of the Act.

8. Road widening and road realignment

Council's records indicate that the land the subject of this Certificate is not affected by any road widening or road realignment under:- (a) Section 25 of the Roads Act 1993; or (b) any environmental planning instrument; or (c) any resolution of the council.

9. Flood related development controls information

No part of the land is within the flood planning area, or between the flood planning area and the probable maximum flood, and therefore IS NOT subject to flood related development controls.

10. Council and other public authority policies on hazard risk restrictions

Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk (other than flooding or bushfire).

Council HAS NOT adopted a policy or been notified of any adopted policy of another public authority, that restricts development on the land because of the likelihood of landslip, tidal inundation, subsidence, contamination, salinity, coastal hazards or sea level rise.

Council DOES HAVE adopted policies or has been notified of adopted policies of another public authority on matters relating to the risk of acid sulfate soils and aircraft noise.

The information below identifies any adopted policies that apply to the land:

Clause 7.1 Acid Sulfate Soils of the Port Stephens Local Environmental Plan 2013 applies to the land. Acid sulfate soil mapping can be viewed on the NSW Department of Planning and Environment Spatial Viewer.

NOTE: The absence of a council policy restricting the development of the land by reason of a particular natural hazard does not mean that the risk from that hazard is non-existent.

11. Bush fire prone land

Whether or not some, all, or none of the land is bush fire prone land.

No, the land is not shown as bush fire prone in Council's records.

12. Loose-fill asbestos insulation

Whether or not the land includes any residential premises (as defined in Division 1A of Part 8 of the *Home Building Act 1989*) that are listed on a register of residential premises that contain or have contained loose-fill asbestos insulation.

No, the land does not include any residential dwelling identified on the Loose-Fill Asbestos Insulation Register as containing loose-fill asbestos ceiling insulation. For further information, please contact Department of Fair Trading by telephoning 13 77 88 or go to their website at www.fairtrading.nsw.gov.au.

13. Mine Subsidence

Whether or not the land is proclaimed to be a mine subsidence district, within the meaning of the the *Coal Mine Subsidence Compensation Act 2017*.

No, the land is not within a proclaimed or declared mine subsidence district.

14. Paper subdivision information

- (1) The name of any development plan adopted by a relevant authority that applies to the land or is proposed to be subject to a consent ballot.
- (2) The date of any subdivision order that applies to the land

Not applicable.

15. Property vegetation plans

If the land is land in relation to which a property vegetation plan is approved under Part 4 of the *Native Vegetation Act 2003*, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

No, Council has not been notified of any property vegetation plans under the Native Vegetation Act 2003 that affect the land to which this certificate applies.

16. Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016*, a statement to that effect ,but only if the council has been notified of the existence of the agreement by the Biodiversity Conservation Trust.

No, Council has not been notified that the land is a biodiversity stewardship site.

Note. Biodiversity stewardship agreements include biobanking agreements under the *Threatened Species Conservation Act 1995*, Part 7A that are taken to be biodiversity stewardship agreements under the *Biodiversity Conservation Act 2016*, Part 5.

17. Biodiversity certified land

If the land is biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*, a statement to that effect.

No, Council has not been notified that the land is biodiversity certified land.

Note. Biodiversity certified land includes land certified under the *Threatened Species Conservation Act 1995*, Part 7AA that is taken to be certified under the *Biodiversity Conservation Act 2016*, Part 8.

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

Whether an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land (but only if the council has been notified of the order).

The land is NOT affected by an order under the *Trees (Dispute Between Neighbours) Act 2006* (of which Council is aware).

19. Annual charges under *Local Government Act 1993* for coastal protection services that relate to existing coastal protection works

If the *Coastal Management Act 2016* applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the *Local Government Act 1993*, section 496B, for coastal protection services that relate to existing coastal protection works.

No, the land is not subject to annual charges under section 496B of the *Local Government Act 1993* for coastal protection services relating to existing coastal protection works to which the owner (or any previous owner) of the land has consented.

Note. "existing coastal protection works" are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before the commencement of section 553B of the *Local Government Act 1993*.

20. Western Sydney Aerotropolis

Not applicable to the Port Stephens Local Government Area.

21. Development consent conditions for seniors housing

If *State Environmental Planning Policy (Housing) 2021*, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

Council is unable to provide site-specific information on any conditions of a development consent granted after 11 October 2007 in relation to Clause 88(2) of the *State Environmental Planning Policy (Housing) 2021*, that may apply to the land.

22. Site compatibility certificates and development consent conditions for affordable rental housing

(1) Whether there is a current site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate (of which Council is aware) in relation to proposed development on the land.

Council is not aware of a current site compatibility certificate issued under *State Environmental Planning Policy (Housing) 2021*.

(2) If *State Environmental Planning Policy (Housing) 2021*, Chapter 2, Part 2, Division 1 or 5 applies to the land, a statement setting out terms of a kind referred to in the Policy, clause 21(1) or 40(1).

The land is not affected by any terms of a kind (of which Council is aware) referred to in Chapter 2, Part 2, Division 1 or clause 21(1) or 40(1) of *State Environmental Planning Policy (Housing) 2021* in respect of development on the land.

23. Water or sewerage services

If water or sewerage services are, or are to be, provided to the land under the *Water Industry Competition Act 2006*.

No, Council is not aware that water or sewerage services are, or are to be, provided under the *Water Industry Competition Act 2006*.

Additional matters

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

- (a) Whether or not the land to which the certificate relates is significantly contaminated land within the meaning of that Act.
- (b) Whether or not the land to which the certificate relates is subject to a management order within the meaning of that Act.
- (c) Whether or not the land to which the certificate relates is the subject of an approved voluntary management proposal within the meaning of the Act.
- (d) Whether or not the land to which this certificate relates is subject to an ongoing maintenance order within the meaning of that Act.
- (e) Whether or not the land to which the certificate relates is the subject of a site audit statement within the meaning of that Act – if a copy of such statement has been provided at any time to the local authority issuing the certificate.

There are no prescribed matters under section 59(2) of the Contaminated Land Management Act 1997 to be disclosed.

PART B: INFORMATION PROVIDED UNDER SECTION 10.7(5)

This information is provided in accordance with section 10.7(5) of the *Environmental Planning and Assessment Act 1979*. Section 10.7(6) states that Council shall not incur any liability in respect of advice provided in good faith pursuant to section 10.7(5) of the Act. If this information is to be relied upon, it should be independently checked.

Heritage

Port Stephens Council must take into consideration the likely effect of proposed development on the heritage significance of a heritage item, heritage conservation area, archaeological site or potential archaeological site, and on its setting, when determining an application for consent to carry out development on land in its vicinity. Please contact Council's Development Assessment and Compliance Section by telephoning 49880255.

Aboriginal Archaeology

When determining a development application on known or potential archaeological sites of both Aboriginal and non-Aboriginal heritage significance, Port Stephens Council must consider an assessment of how the proposed development would affect the conservation of the site and any relic known or reasonably likely to be located at the site. Please contact Council's Development Assessment and Compliance Section on 49880255 for more information.

Aircraft Noise

All areas of the Port Stephens Local Government area may be affected by aircraft noise from time to time. RAAF Base Williamtown – Newcastle Airport and Salt Ash Air Weapons Range are located within the Port Stephens Local Government Area. Further information can be obtained from the Commonwealth Department of Defence website and from the Port Stephens Council Strategy and Environment Section and you are advised to make further enquiries.

Koala Habitat

Parts of the Port Stephens Local government Area are affected by Koala Habitat and subject to the Port Stephens Comprehensive Koala Plan of Management 2002 made under State Environmental Planning Proposal No. 44. Further information can be obtained from Council's Strategy & Environment Section on 49880326 or email plancert@portstephens.nsw.gov.au.

Invasive Species

Parts of the Port Stephens Local Government Area contain plants that pose a risk according to the *Biosecurity Act 2015* which may restrict the use of the land. For further information please contact Council's Strategy & Environment Section on 4988 0326 or email weeds@portstephens.nsw.gov.au

Development consents relating to the land

Please contact Customer Relations on (02) 4988 0255, for any enquiries regarding development consent over the land in the past 5 years.

Issued by Port Stephens Council Development Services Group,
on behalf of **Tim Crosdale, General Manager**

Security Classification: Sensitive Personal
Please do not amend the subject line of this email

Dear Jason

**Re: Site Search for Schedule 11 Hazardous Chemicals on premises
Application – Result not found**

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises, received by SafeWork NSW on 22 July 2024¹ for the following site: 42 Donald Street Nelson Bay NSW, 2315.

A search of the records held by SafeWork NSW has not located any records pertaining to the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 01003957

- Email: licensing@safework.nsw.gov.au
- Phone: 13 10 50

Kind regards

May

May Neill

Licensing Representative | Safework Licensing

Safework NSW

p 13 10 50 |

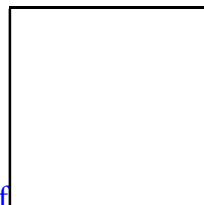
e may.neill@customerservice.nsw.gov.au | www.customerservice.nsw.gov.au

Level 3, 32 Mann Street, Gosford, NSW 2250

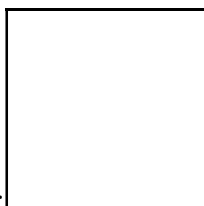


SafeWork

[42 Donald Street Nelson Bay NSW, 2315 - TaxInvoice.pdf](#)



thread::azPZ8xI2d1y3R-Tsf4VxGXw::



Appendix D

Site photographs



Photo 1: Lot 15, from Church Street, looking east



Photo 2: Lot A, from Church Street, looking east

Site Photographs

**Proposed residential
development**

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

1

REV:

0

DATE

Aug 2024



Photo 3: Lot B, from Donald Street looking north



Photo 4: Eastern area of Lot 15, looking west

 GROUNDED EXPERTISE		Site Photographs		PROJECT:	227295.00
		Proposed residential development		PLATE No:	2
		5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
		CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 5: Eastern area of Lot 15, looking south



Photo 6: Residential dwelling, Lot 15,, looking west

 GROUNDED EXPERTISE	Site Photographs		PROJECT:	227295.00
	Proposed residential development		PLATE No:	3
	5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
	CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 7: Stockpiles of materials, subfloor of residential dwelling (Lot 15), looking west



Photo 8: Fibro sheeting in black plastic, subfloor of residential dwelling (Lot 15), looking west

Site Photographs

Proposed residential development

5-7 Church & 42 Donald Street, Nelson Bay NSW

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

4

REV:

0

DATE

Aug 2024



Photo 9: Garage, Lot 15, looking north west

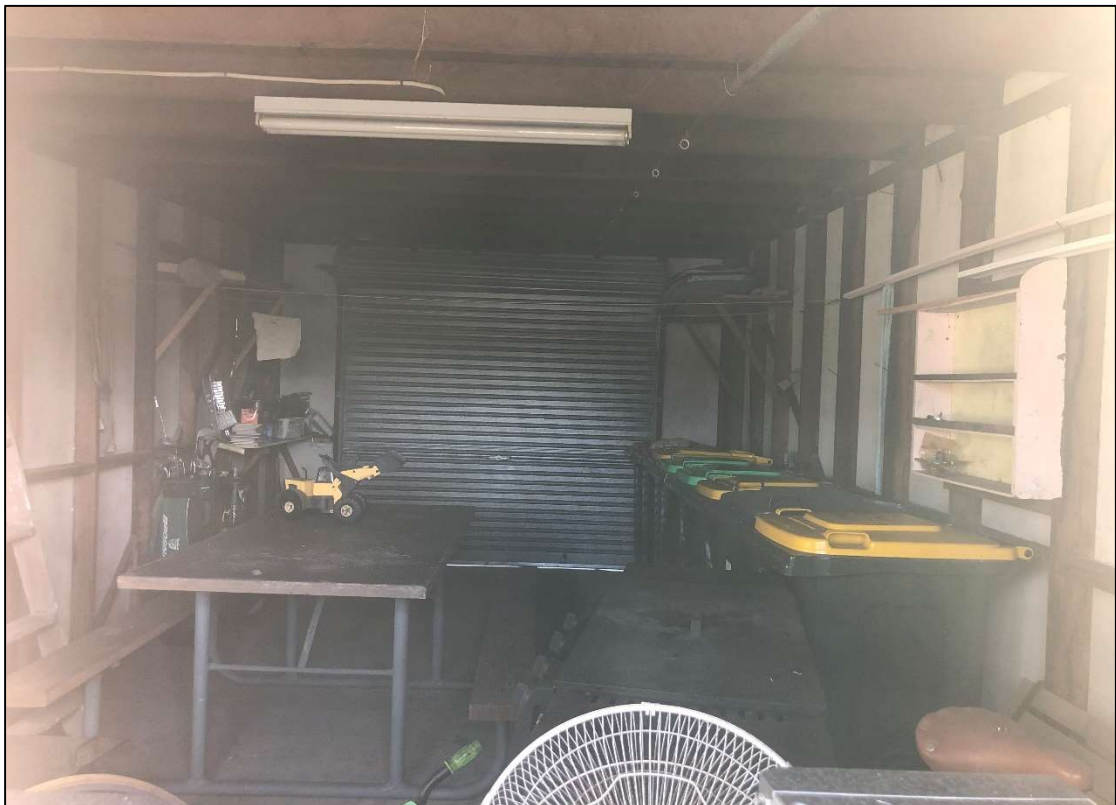


Photo 10: Inside garage (Lot 15), looking west

Site Photographs

**Proposed residential
development**

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

5

REV:

0

DATE

Aug 2024



Photo 11: Outhouse, Lot 15, looking south



Photo 12: Lot 15, looking east



GROUND
ED EXPERTISE

Site Photographs

**Proposed residential
development**

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

6

REV:

0

DATE

Aug 2024



Photo 13: Fibro fragment, Lot 15



Photo 14: Fibro sheeting, Lot 15, looking east

 DOUGLAS PARTNERS GROUNDED EXPERTISE		Site Photographs		PROJECT:	227295.00
		Proposed residential development		PLATE No:	7
		5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
		CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 15: Lot A, looking west



Photo 16: Lot A, looking south

 DOUGLAS PARTNERS GROUNDED EXPERTISE		Site Photographs		PROJECT:	227295.00
		Proposed residential development		PLATE No:	8
		5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
		CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 17: Fibro fragment, Lot A, looking south



Photo 18: Fill, Lot A, looking west

Site Photographs

**Proposed residential
development**

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

9

REV:

0

DATE

Aug 2024



Photo 19: Commercial building, Lot B, looking north west



Photo 20: Concreted area, Lot B, looking west

 		Site Photographs		PROJECT:	227295.00
		Proposed residential development		PLATE No:	10
		5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
		CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 21: Concreted area, Lot B, looking north east



Photo 22: Pit, Lot B

Site Photographs

PROJECT: 227295.00

**Proposed residential
development**

PLATE No: 11

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

REV: 0

CLIENT Fortezza Group Pty Ltd

DATE Aug 2024



Photo 23: Marked concrete patch, Lot B



Photo 24: Fill, Lot B, looking west

 GROUNDED EXPERTISE	Site Photographs		PROJECT:	227295.00
	Proposed residential development		PLATE No:	12
	5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
	CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024



Photo 25: Fibro fragments, Lot B



Photo 26: Fibro fragment, Lot B, looking north



GROUND
ED
EXPERTISE

Site Photographs

**Proposed residential
development**

**5-7 Church & 42 Donald
Street, Nelson Bay NSW**

CLIENT

Fortezza Group Pty Ltd

PROJECT:

227295.00

PLATE No:

13

REV:

0

DATE

Aug 2024



Photo 27: Fibro fragment, Lot B, looking north

 GROUNDED EXPERTISE	Site Photographs		PROJECT:	227295.00
	Proposed residential development		PLATE No:	14
	5-7 Church & 42 Donald Street, Nelson Bay NSW		REV:	0
	CLIENT	Fortezza Group Pty Ltd	DATE	Aug 2024

Appendix E

Data quality objectives

1. Data quality objectives

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

Table 1: Data quality objectives

Step	Summary
1: State the problem	The objective of the preliminary investigation is to assess the potential for contamination at the site based on past and present land uses and to comment on the need for further investigation and/or management with regard to the proposed development. Preliminary subsurface investigation conducted in conjunction with the geotechnical investigation has also been undertaken to provide a preliminary assessment the contamination status of the site with respect to the proposed land use. The report is being undertaken as the site is to be redeveloped. A preliminary conceptual site model (CSM) is to be prepared for the proposed development on the basis of the preliminary assessment. The project team consisted of experienced environmental engineers and scientists working in the roles of Project Principal, Project Reviewer, Project Manager and field staff.
2: Identify the decisions / goal of the study	Conduct a site history review and site walkover to identified possible contaminating previous uses and prepare a preliminary CSM. The CSM identifies the associated contaminants of potential concern (CoPC) and the likely impacted media. The site assessment criteria (SAC) for each of the CoPC are detailed in Appendix G. The decision for the preliminary subsurface investigation is to establish whether or not the results fall below the SAC. This information will be utilised to inform further investigation requirements to assess the site's suitability from a contamination perspective and possible remediation requirements / options where required.
3: Identify the information inputs	Inputs will include information from the site history review and site walkover to inform contaminant sources and CoPC and also the analytical results for the CoPC (identified in the CSM) from NATA accredited laboratories and methods, where possible. The SAC for each of the CoPC are detailed in Appendix G. A photoionisation detector (PID) will be used on-site to screen soils for VOC. PID readings will be used to inform sample selection for laboratory analysis.
4: Define the study boundaries	The lateral boundaries of the investigation area are shown on Drawing 1, Appendix A. The vertical boundaries are to the extent of contamination impact as determined from the site history assessment and site observations. The assessment is limited to the timeframe over which the field works were undertaken. Constraints to the assessment are identified and discussed in the conclusions of the report including access restrictions to parts of the site.

Step	Summary
5: Develop the analytical approach (or decision rule)	The decision rule for the desktop PSI is to identify the potential contaminant sources applicable to the site and proposed development and confirm additional investigation requirements where required. The decision rule for the preliminary subsurface investigation is to compare all analytical results with the SAC (Appendix G, based on NEPC (2013)). Where guideline values are absent, other sources of guideline values accepted by NEPC (2013) shall be adopted where possible. Where a sample result exceeds the adopted criterion, a further site-specific assessment will be made as to the risk posed by the presence of that contaminant(s). Initial comparisons will be with individual results to assess potential risks posed by the site contamination. Note: Statistical analysis, while a feasible assessment tool, is not suitable for the preliminary investigation given the preliminary nature of the assessment. Quality control results are to be assessed according to their relative percent difference (RPD) values. For field duplicates, triplicates and laboratory results, RPD values should generally be below 30%; for field blanks (NEPC, 2013). The field and laboratory quality assurance assessment is included in Appendix J.
6: Specify the performance or acceptance criteria	Baseline condition: Contaminants at the site and/or statistical analysis of data (in line with NEPC (2013)) exceed the human health and environmental SAC and pose a potentially unacceptable risk to receptors (null hypothesis). Alternative condition: Contaminants at the site and statistical analysis of data (in line with NEPC (2013)) comply with the human health and environmental SAC and as such, do not pose a potentially unacceptable risk to receptors (alternative hypothesis). Unless conclusive information from the collected data is sufficient to reject the null hypothesis, it is assumed that the baseline condition is true. Uncertainty that may exist due to the above potential decision errors shall be mitigated as follows: - Additional detailed subsurface investigation to confirm site conditions and assess all potential contaminant sources and CoPC; - As well as a primary screening exercise, the use of the 95% UCL as per NEPC (2013) may be applied, i.e. 95% is the defined confidence level associated with the UCL on the geometric mean for contaminant data. The resultant 95% UCL shall subsequently be screened against the corresponding SAC. Note: The statistical assessment will only be able to be applied to certain data-sets, such as those obtained via systematic sampling across the whole site. Identification of areas for targeted sampling will be via professional judgement and errors will not be able to have a probability assigned to them.
7: Optimise the design for obtaining data	The desktop PSI and preliminary subsurface investigation findings will be utilised to inform potential contaminant sources, CoPC and additional detailed investigation requirements. Where further investigation is required, the results of the subsurface investigation including preliminary soil testing will be utilised to optimise investigation methods, media to be sampled, CoPC for analysis for the DSI to be outlined in a sampling, analysis and quality plan (SAQP).

2. Reference

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

Appendix F

Field work methods

1. Guidelines

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

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).
- HEPA *PFAS National Environmental Management Plan (NEMP)* (HEPA, 2020).

2. Soil sampling

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

- Collect soil samples directly from each 1.5 m length of disposable plastic push tube at the nominated sample depth;
- Collect near surface samples using hand tools;
- Transfer samples in laboratory-prepared glass jars with Teflon lined lids by hand, capping immediately and minimising headspace within the sample jar;
- Transfer samples in laboratory-prepared container (specific for PFAS) by hand, capping immediately and minimising headspace within the sample jar;
- Collect replicate samples in zip-lock bags for photoionisation detector (PID) screening;
- Collect ~500 ml samples for fibrous asbestos and asbestos fines (FA and AF) analysis;
- Collect bulk (~10 L) soil samples for bonded asbestos containing material (ACM) field sieve test;
- Wear a new disposable nitrile glove for each sample point thereby minimising potential for cross-contamination;
- Collect 10% replicate samples for quality control (QC) purposes;
- Label sample containers with individual and unique identification details, including project number, sample location and sample depth (where applicable);
- Place samples into a cooled, insulated and sealed container for transport to the laboratory; and
- Use chain of custody documentation.

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

2.1 Field testing

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

PID field test

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

Assessment of subsurface ACM

- Collect at least one bulk (~10 L) soil sample from each borehole;
- Weigh each bulk sample;
- Screen each bulk sample through a ≤ 7 mm aperture sieve;
- Weigh all retrieved potential ACM fragments; and
- Calculate the asbestos concentration (% w/w) in soil as per the procedure described in NEPC (2013).

3. References

HEPA. (2020). *PFAS National Environmental Management Plan (NEMP)*. Version 2.0: Heads of EPAs Australia and New Zealand and Australian Government Department of the Environment.

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

Appendix G

Site assessment criteria

1. Introduction

1.1 Guidelines

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

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).
- CRC CARE *Health screening levels for petroleum hydrocarbons in soil and groundwater* (CRC CARE, 2011).
- HEPA *PFAS National Environmental Management Plan (NEMP)* (HEPA, 2020).

1.2 General

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

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

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

2. Soils

2.1 Health investigation and screening levels

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

Table 1: Health investigation levels (mg/kg)

Contaminant	HIL-A
Metals	
Arsenic	100
Beryllium	60
Boron	4500
Cadmium	20
Chromium (VI)	100
Copper	6000
Lead	300
Manganese	3800
Mercury (inorganic)	40
Nickel	400
Selenium	200
Zinc	7400
PAH	
B(a)P TEQ	3
Total PAH	300
OCP	
DDT+DDE+DDD	240
Aldrin and dieldrin	6
Chlordane	50
Endosulfan	270
Endrin	10
Heptachlor	6
HCB	10
Methoxychlor	300
Mirex	10
OPP	
Chlorpyrifos	160
PCB	
PCB	1

Table 2: Health screening levels (mg/kg)

Contaminant	HSL-A&B	HSL-A&B	HSL-A&B	HSL-A&B
SAND	0 m to <1 m	1 m to <2 m	2 m to <4 m	4 m+
Benzene	0.5	0.5	0.5	0.5
Toluene	160	220	310	540
Ethylbenzene	55	NL	NL	NL
Xylenes	40	60	95	170
Naphthalene	3	NL	NL	NL
TRH F1	45	70	110	200
TRH F2	110	240	440	NL

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX

TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene

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

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

Table 3: Health screening levels for direct contact (mg/kg)

Contaminant	DC HSL-A	DC HSL-IMW
Benzene	100	1100
Toluene	14 000	120 000
Ethylbenzene	4500	85 000
Xylenes	12 000	130 000
Naphthalene	1400	29 000
TRH F1	4400	82 000
TRH F2	3300	62 000
TRH F3	4500	85 000
TRH F4	6300	120 000

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX
TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene
IMW intrusive maintenance worker

2.2 Health investigation levels for per- and poly-fluoroalkyl substances in soil

The laboratory analytical results for per- and poly-fluoroalkyl substances (PFAS) in soil have been assessed against HIL published in HEPA (2020). The HIL represent a nationally-agreed suite that should be used to inform site investigations. The HIL are intentionally conservative, and an exceedance of these criteria may not constitute a risk if other exposure pathways are controlled. An exceedance of the HIL should trigger further investigations, such as a site-specific risk assessment. At the time of this investigation, screening values were available only for perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS).

The HIL derived from Table 2 of HEPA (2020) are in Table 4.

Table 4: Health investigation levels (mg/kg)

Contaminant	HIL-A
PFOS and PFHxS *	0.01
PFOA	0.1

Notes: * Includes PFOS only, PFHxS only and the sum of the two.

2.3 Asbestos in soil

for asbestos in soil are based on likely exposure levels for different scenarios published in NEPC (2013) for the following forms of asbestos:

- Bonded asbestos containing material (ACM); and
- Fibrous asbestos and asbestos fines (FA and AF).

The HSL are in Table 5.

Table 5: Health screening levels for asbestos

Form of asbestos	HSL-A
ACM	0.01%
FA and AF	0.001%
FA and AF and ACM	No visible asbestos for surface soil *

Notes: Surface soils defined as top 10 cm.

* Based on site observations at the sampling points and the analytical results of surface samples.

2.4 Ecological investigation levels

Ecological investigation levels (EIL) and added contaminant limits (ACL), where appropriate, have been derived in NEPC (2013) for arsenic, copper, chromium (III), nickel, lead, zinc, DDT and naphthalene. The adopted EIL, derived using the interactive (excel) calculation spreadsheet on the NEPM toolbox website are shown in Table 7, with inputs into their derivation shown in Table 6.

Table 6: Inputs to the derivation of the ecological investigation levels

Variable	Input	Rationale
Age of contaminants	"Aged" (>2 years) / "new" (<2 years)	Identified sources of contamination are likely >2 years old
pH	5.3	Minimum result in natural soils from laboratory testing
CEC	1 cmol _c /kg	Conservative assumption
Clay content	1 %	Sand soil type
Traffic volumes	High	Developed site
State / Territory	New South Wales	Nelson Bay

Table 7: Ecological investigation levels (mg/kg)

Contaminant	EIL-A-B-C
Metals	
Arsenic	100
Copper	45
Nickel	6
Chromium III	200
Lead	1100
Zinc	170
PAH	
Naphthalene	170
OCP	
DDT	180

Notes:
 EIL-A-B-C urban residential and public open space

2.5 Ecological screening levels

Ecological screening levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. The adopted ESL are shown in Table 8.

Table 8: Ecological screening levels (mg/kg)

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

Notes: ESL are of low reliability except where indicated by * which indicates that the ESL is of moderate reliability
 TRH F1 is TRH C₆-C₁₀ minus BTEX
 TRH F2 is TRH >C₁₀-C₁₆ including naphthalene
 ESL-A-B-C urban residential and public open space

2.6 Ecological soil guideline values

The interim ecological soil guideline values (EGV) derived from Table 3 of HEPA (2020) are in Table 9.

Table 9: Ecological soil guideline values (mg/kg) – all land uses

Contaminant	Direct exposure	Indirect exposure
PFOS	1	0.01
PFOA	10	NC
PFHxS	NC	NC

Notes: NC no criterion

2.7 Management limits

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

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

The adopted management limits are in Table 10.

Table 10: Management limits (mg/kg)

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

Notes: TRH F1 is TRH C₆-C₁₀ including BTEX
 TRH F2 is TRH >C₁₀-C₁₆ including naphthalene
 ML-A-B-C residential, parkland and public open space

3. References

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

HEPA. (2020). *PFAS National Environmental Management Plan (NEMP)*. Version 2.0: Heads of EPAs Australia and New Zealand and Australian Government Department of the Environment.

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

Appendix H

Borehole logs (6 to 10)

BOREHOLE LOG

CLIENT: Fortezza Group Pty Ltd
PROJECT: Proposed Development - The Belverde
LOCATION: 5-7 Church & 42 Donald Street, Nelson Bay, NSW

SURFACE LEVEL: 24.5 AHD
COORDINATE: E:419566.3, N:6379292.7
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 6
PROJECT No: 227295.00
DATE: 16/07/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED							SAMPLE			TESTING AND REMARKS											
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	ORIGIN(#)	CONSIS. ^(*) DENSITY. ^(*)	MOISTURE	REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS									
16/07/24 No free groundwater observed	0.10	FILL / Silty SAND: brown; fine to medium; trace brick, tile, plastic.		FILL	NA	M		B/D/ES		0.10	PID	<table><tr><td>5</td><td>10</td><td>15</td></tr></table>	5	10	15						
	5	10		15																	
	24	SAND: pale brown; fine to medium.		L to MD				B													
	1																				
	23																				
	2																				
	22																				
	3																				
	21																				
	4																				
	20																				
	5	From 4.20m-4.30m: brown																			
	5.50	Silty SAND: brown dark brown; fine to medium; (indurated sand).		AEO	NA	M				D/ES			3.00	PID	<1ppm						
	6																				
	6	Borehole discontinued at 6.00m depth. Limit of investigation.																			
	18																				
	7																				
	17																				
	8																				
	16																				
9																					
15																					

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Geoprobe
METHOD: Push Tube 0-6.0m
REMARKS: Coordinates and elevations measured by dGPS with typical accuracy of ±0.1m, depending on satellite coverage and site condition

OPERATOR: Tucker Environmental Drilling
LOGGED: Lambert
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



BOREHOLE LOG

CLIENT: Fortezza Group Pty Ltd
PROJECT: Proposed Development - The Belverde
LOCATION: 5-7 Church & 42 Donald Street, Nelson Bay, NSW

SURFACE LEVEL: 23.2 AHD
COORDINATE: E:419582.4, N:6379289.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 7
PROJECT No: 227295.00
DATE: 16/07/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED						SAMPLE			TESTING AND REMARKS						
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	ORIGIN(%)	CONSIS. (%)	DENSITY, (g)	MOISTURE	REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS		
16/07/24 No free groundwater observed	0.10	FILL / Silty SAND: dark brown; fine to medium; trace rootlets.		FILL	NA		M		B/D/ES		0.10	PID	<1ppm		
		SAND: pale brown; fine to medium.													
					L		M		D/ES		0.50	PID	<1ppm		
	1								D/ES		1.00	PID	<1ppm		
	2			AEO					D/ES		2.00	PID	<1ppm		
	3				NA		M		D/ES		3.00	PID	<1ppm		
	4								D/ES		4.00	PID	<1ppm		
	4.70	Silty SAND: brown dark brown; fine to medium; (indurated sand).			AEO		NA			M	D/ES		5.00	PID	<1ppm
	5														
	6										D/ES		6.00	PID	<1ppm
Borehole discontinued at 6.00m depth. Limit of investigation.															

NOTES: *Soil origin is "probable" unless otherwise stated. †Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: *Soil origin is "probable" unless otherwise stated. *Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Geoprobe
METHOD: Push Tube 0-6.0m
REMARKS: Coordinates and elevations measured by dGPS with typical accuracy of ±0.1m, depending on satellite coverage and site condition

OPERATOR: Tucker Environmental Drilling
LOGGED: Lambert
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



BOREHOLE LOG

CLIENT: Fortezza Group Pty Ltd
PROJECT: Proposed Development - The Belverde
LOCATION: 5-7 Church & 42 Donald Street, Nelson Bay, NSW

SURFACE LEVEL: 21.2 AHD
COORDINATE: E:419591.8, N:6379274.0
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 8
PROJECT No: 227295.00
DATE: 16/07/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED							SAMPLE			TESTING AND REMARKS											
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	ORIGIN(%)	CONSIS. (%)	DENSITY (%)	MOISTURE	REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS								
16/07/24 No free groundwater observed	0.10	FILL / Silty SAND: dark brown; fine to medium; trace rootlets. SAND: pale brown; fine to medium.		FILL	NA	L	M		D/ES	0.10	0.10	PID	<1ppm	5	10	15					
	B/D/ES				PID				<1ppm												
		1													1	PID	<1ppm				
		2																			
		3								AEO		M									
		4									NA										
	5								D/ES		5.00	PID	<1ppm								
	6								D/ES		6.00	PID	<1ppm								
	7	Borehole discontinued at 6.00m depth. Limit of investigation.																			
	8																				
	9																				
	10																				
	11																				
	12																				
	13																				
	14																				

NOTES: *Soil origin is "probable" unless otherwise stated. †Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: [®]Soil origin is "probable" unless otherwise stated. [©]Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Geoprobe
METHOD: Push Tube 0-6.0m
REMARKS: Coordinates and elevations measured by dGPS with typical accuracy of ±0.1m, depending on satellite coverage and site condition

OPERATOR: Tucker Environmental Drilling
LOGGED: Lambert
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions

BOREHOLE LOG

CLIENT: Fortezza Group Pty Ltd
PROJECT: Proposed Development - The Belverde
LOCATION: 5-7 Church & 42 Donald Street, Nelson Bay, NSW

SURFACE LEVEL: 24.5 AHD
COORDINATE: E:419548.9, N:6379262.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 9
PROJECT No: 227295.00
DATE: 16/07/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED							SAMPLE			TESTING AND REMARKS										
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	ORIGIN(%)	CONSIS. ^(*) DENSITY. ^(*)	MOISTURE	REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS							
16/07/24 No free groundwater observed	24	0.60	FILL / Silty SAND: grey; fine to medium; trace brick, tile, glass. 0.00m: fibro fragment 0.50m: fibro fragment		FILL	NA	M		B/D/ES		0.10	PID		5	10	15				
		1	SAND: pale grey; fine to medium.			MD			D/ES		0.50	PID								
		23																		
		2																		
		22							D/ES		1.00	PID								
		3																		
		21	3.50	Silty SAND: brown; fine to medium; (indurated sand).																
		4																		
		20																		
		5																		
	19																			
	6																			
		6							D/ES		6.00	PID								
	18	7	Borehole discontinued at 6.00m depth. Limit of investigation.																	
	17	8																		
	16	9																		
	15																			

NOTES: ^(*)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: *Soil origin is "probable" unless otherwise stated. *Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Geoprobe
METHOD: Push Tube 0-6.0m
REMARKS: Coordinates and elevations measured by dGPS with typical accuracy of ±0.1m, depending on satellite coverage and site condition

OPERATOR: Tucker Environmental Drilling
LOGGED: Lambert
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions

BOREHOLE LOG

CLIENT: Fortezza Group Pty Ltd
PROJECT: Proposed Development - The Belverde
LOCATION: 5-7 Church & 42 Donald Street, Nelson Bay, NSW

SURFACE LEVEL: 23.3 AHD
COORDINATE: E:419568.2, N:6379269.4
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: 10
PROJECT No: 227295.00
DATE: 16/07/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED							SAMPLE			TESTING AND REMARKS			
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	ORIGIN(%)	CONSIS. (°)	DENSITY. (°)	MOISTURE	REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
16/07/24 No free groundwater observed	0.30	FILL / Silty SAND: dark brown; fine to medium; trace brick, tile.		FILL	NA		M		B/D/ES		0.10	PID	<1ppm
		SAND: pale brown ; fine to medium.							D/ES		0.50	PID	<1ppm
	1				VL to L				D/ES		1.00	PID	<1ppm
	2			AEO			M		D/ES		2.00	PID	<1ppm
	3				NA				D/ES		3.00	PID	<1ppm
	3.50	Silty SAND: brown dark brown; fine to medium; (indurated sand).							D/ES		4.00	PID	<1ppm
	4								D/ES		5.00	PID	<1ppm
	5			AEO	NA		M		D/ES		6.00	PID	<1ppm
	6	Borehole discontinued at 6.00m depth. Limit of investigation.							D/ES				
		7											
8													
9													

NOTES: *Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(°)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Geoprobe
METHOD: Push Tube 0-6.0m
REMARKS: Coordinates and elevations measured by dGPS with typical accuracy of ±0.1m, depending on satellite coverage and site condition

OPERATOR: Tucker Environmental Drilling
LOGGED: Lambert
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



Appendix I

Table I1 – Summary of asbestos field screening

Table I2 – Summary of laboratory results – Land use

Table I3 – Summary of laboratory results – Waste classification

Laboratory test results (Envirolab report 356894)

Chain of custody (field and despatch)

Sample receipts

Table II: Summary of Asbestos Field Screening

Test location	Sample depth (m)	Soil description	Soil mass (kg)	No. fragments	Fragment condition G - good P - poor	Fibro size range (mm)	Total fibro mass (g)	Non asbestos containing fibro mass (g)	Asbestos containing fibro Mass (g)	Asbestos content in soil (15% asbestos assumed) (% w/w)	Asbestos content in soil (30% asbestos assumed) (% w/w)
6	0-0.1	Fill / silty sand - brown, trace brick, tile, plastic	9	0	-	-	-	-	-	-	-
7	0-0.1	Fill / silty sand - dark brown trace rootlets	10	0	-	-	-	-	-	-	-
8	0-0.1	Fill / silty sand - dark brown trace rootlets	11	0	-	-	-	-	-	-	-
9	0-0.6	Fill / silty sand - grey, trace brick, tile, glass, fibro fragme	11	3	G	10 - 80	39	0	39	0.05%	0.11%
10	0-0.1	Fill / silty sand - grey, trace brick, tile	9	0	-	-	-	-	-	-	-
Criteria	HSL A - residential land use, day care centres, preschools, etc									0.01% w/w asbestos for ACM	

Notes to table:

Criteria for all site uses is 0.001% asbestos for Friable asbestos or Asbestos Fines

ACM - Asbestos Containing Material

w/w - weight/weight

- Not Applicable

[illegible]

Notes:

- a QA/QC replicate of sample listed directly below the primary sample
- b Naphthalene reported as highest detection from the BTEXN or PAH suite, or if both results <PQL as lowest PQL
- c EIL criteria applies to DDT only

Site Assessment Criteria (SAC):				
SAC based on generic land use thresholds for Residential A with garden/accessible soil				
Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:				
HL	HLA-A (NEPC, 2013) or HEPA, 2020 (PFAS only)	EGV	EGV all land uses, direct exposure (HEPA, 2020)	
HSL (vapour intrusion)	HSL-A/B (NEPC, 2013)	ESL	Urban Residential and Public Open Space (NEPC, 2013)	
DC	Direct contact HSL A Residential (Low density) (CDC CARE, 2017)	ML	Residential, Parkland and Public Open Space (NEPC, 2013)	
		EGV-Indir	EGV, all land uses, Indirect exposure (HEPA, 2020)	

Table I3 - Summary of laboratory Results – Waste classification

			Metals										TRH		BTEX				PAH		OCP					OPP	PCB	PFAS		Asbestos														
			Total Arsenic	Beryllium	Cadmium	Total Chromium	Lead	Lead in TCLP	Mercury (Inorganic)	Molybdenum	Nickel	Selenium (Total)	TRH C6- C9	TRH ClO-C26	Benzene	Toluene	Ethylbenzene	Total Xylenes	Benzo(a)pyrene (BaP)	Total PAH	Scheduled Chemical Waste (standard)	Total Endosulfan	Total Analyzed OCP	Mirex	Total Analyzed OPP	Total PCB	PFCA	PFOS + PFHxS	Asbestos ID in materials	Trace Analysis (AS)	Asbestos ID in soil <0.1g/kg	Asbestos ID in soil <0.1g/kg	Trace Analysis (INEC)	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation	Total Asbestos#1	Asbestos Comment	Asbestos Summary					
		PQL	4	1	0.4	1	1	0.1	0.1	1	1	2	25	50	0.2	0.5	1	1	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.0001	0.0001									0.001	0.1			0.001			
Sample ID	Depth	Sample Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	g	g	%(w/w)	g/kg										
6	0 - 0.1 m	16/07/24	<4	<1	<0.4	<1	6	-	<0.1	<1	2	<2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	NAD	NAD	-	-	<0.001	<0.1	NI	-	-			
6 - [TRIPLICATE]	0 - 0.1 m	16/07/24	<4	<1	<0.4	<1	3	-	<0.1	<1	<1	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
6	2 m	16/07/24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0001	<0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-			
7	0 - 0.1 m	16/07/24	<4	<1	<0.4	<1	2	-	<0.1	<1	<1	<2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	NAD	NAD	NAD	-	-	<0.001	<0.1	NI	-	-		
8	0 - 0.1 m	16/07/24	<4	<1	<0.4	1	21	-	<0.1	<1	<1	<2	<25	<50	<0.2	<0.5	<1	<1	0.07	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	NAD	NAD	NAD	-	-	<0.001	<0.1	NI	-	-		
8	6 m	16/07/24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0001	<0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	0 - 0.1 m	16/07/24	<4	<1	<0.4	1	53	-	<0.1	<1	<1	<2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	0.4	<0.1	0.4	<0.1	<0.1	<0.1	<0.0001	<0.0001	-	-	-	-	-	NAD	NAD	NAD	-	-	<0.001	<0.1	NI	-	-	
9	0.5 m	16/07/24	<4	<1	<0.4	<1	9	-	<0.1	<1	<1	<2	<25	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	1.3	<0.1	1.3	<0.1	<0.1	<0.1	-	-	-	-	-	-	Detected	NAD	NAD	0.6526	-	-	<0.001	1.0637	YES	Detected	-	-
10	0 - 0.1 m	16/07/24	<4	<1	<0.4	5	160	0.2	<0.1	<1	1	<2	<25	<50	<0.2	<0.5	<1	<1	0.09	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	NAD	NAD	NAD	-	-	<0.001	<0.1	NI	-	-		
DV/DCL	0 m	16/07/24	<4	<1	<0.4	4	120	-	<0.1	<1	1	<2	<25	<50	<0.2	<0.5	<1	<1	0.1	1.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Waste Classification Criteria ^f																																												
CT1			100	20	20	100	100	-	4	-	40	20	-	10,000	10	288	600	1000	0.8	200	<50	60	-	-	4	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SCC1			500	100	100	1,900	1,500	-	50	-	1,050	50	-	10,000	18	518	1,080	1,800	10	200	<50	108	-	-	7.5	<50	18	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TCLP1			-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CT2			400	80	80	400	400	-	16	-	160	80	-	40,000	40	1,152	2,400	4,000	32	800	<50	240	-	-	16	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SCC2			2,000	400	400	7,600	6,000	-	200	-	4,200	200	-	40,000	72	2,073	4,320	7,200	23	800	<50	432	-	-	30	<50	72	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TCLP2			-	-	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

☐ CT1 exceedance ☐ TCLP1 and/or SCC1 exceedance ☐ CT2 exceedance ☐ TCLP2 and/or SCC2 exceedance ☐ Asbestos detection
- = Not tested, no criteria or not applicable NAD = no asbestos detected

Notes:

- a QA/QC replicate of sample listed directly below the primary sample
- b Total chromium used as initial screen for chromium(VI).
- c Total recoverable hydrocarbons (TRH) used as an initial screen for total petroleum hydrocarbons (TPH)
- d Criteria for scheduled chemicals used as an initial screen
- e Criteria for Chlorpyrifos used as initial screen
- f NSW EPA, 2014, Waste Classification Guidelines Part 1; Classifying Waste
- PQL Practical quantitation limit
- CT1 Maximum values of specific contaminant concentration (SCC) for classification without TCLP: General solid waste
- SCC1 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
- TCLP1 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
- CT2 Maximum values of specific contaminant concentration (SCC) for classification without TCLP: Restricted solid waste
- SCC2 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: Restricted solid waste
- TCLP2 Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: Restricted solid waste

CERTIFICATE OF ANALYSIS 356894

Client Details

Client	Douglas Partners Newcastle
Attention	Kate Fulham
Address	Box 324 Hunter Region Mail Centre, Newcastle, NSW, 2310

Sample Details

Your Reference	<u>227295.00 Nelson Bay</u>
Number of Samples	12 Soil, 8 Material
Date samples received	18/07/2024
Date completed instructions received	18/07/2024

Analysis Details

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

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

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

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

Report Details

Date results requested by	25/07/2024
Date of Issue	25/07/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Asbestos Approved By

Analysed by Asbestos Approved Analyst: Lucy Zhu
 Authorised by Asbestos Approved Signatory: Lucy Zhu

Authorised By

Nancy Zhang, Laboratory Manager

Results Approved By

Diego Bigolin, Inorganics Supervisor
 Dragana Tomas, Senior Chemist
 Giovanni Agosti, Group Technical Manager
 Lucy Zhu, Asbestos Supervisor
 Sean McAlary, Chemist (FAS)
 Timothy Toll, Senior Chemist

vTRH(C6-C10)/BTEXN in Soil

Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024	22/07/2024	22/07/2024	22/07/2024
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	94	108	85	86	83

vTRH(C6-C10)/BTEXN in Soil

Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024
TRH C ₆ - C ₉	mg/kg	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
Naphthalene	mg/kg	<1	<1
Total +ve Xylenes	mg/kg	<1	<1
Surrogate aaa-Trifluorotoluene	%	102	105

svTRH (C10-C40) in Soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	20/07/2024	20/07/2024	20/07/2024	20/07/2024	20/07/2024
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	75	77	78	76	77

svTRH (C10-C40) in Soil			
Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	20/07/2024	20/07/2024
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50
Surrogate o-Terphenyl	%	74	74

PAHs in Soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.07	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	0.5	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	100	101	103	103	101

PAHs in Soil			
Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	0.2	0.3
Pyrene	mg/kg	0.2	0.2
Benzo(a)anthracene	mg/kg	<0.1	0.1
Chrysene	mg/kg	<0.1	0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.2
Benzo(a)pyrene	mg/kg	0.09	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Total +ve PAH's	mg/kg	0.4	1.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	98	102

Organochlorine Pesticides in soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	0.4	1.3
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	103	105	101	106	103

Organochlorine Pesticides in soil			
Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	99	101

Organophosphorus Pesticides in Soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	103	105	101	106	103

Organophosphorus Pesticides in Soil			
Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024
Dichlorvos	mg/kg	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	99	101

PCBs in Soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate 2-Fluorobiphenyl	%	102	103	96	100	101

PCBs in Soil			
Our Reference		356894-8	356894-19
Your Reference	UNITS	10	D1/JCL
Depth		0-0.1	-
Date Sampled		16/07/2024	16/07/2024
Type of sample		Soil	Soil
Date extracted	-	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate 2-Fluorobiphenyl	%	95	95

Acid Extractable metals in soil						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024	22/07/2024	22/07/2024	22/07/2024
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	<1	<1	1	1	<1
Copper	mg/kg	3	<1	17	4	<1
Lead	mg/kg	6	2	21	53	9
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	2	<1	<1	<1	<1
Zinc	mg/kg	38	7	64	82	34
Iron	mg/kg	1,200	80	950	940	100
Manganese	mg/kg	5	<1	31	25	3
Beryllium	mg/kg	<1	<1	<1	<1	<1
Boron	mg/kg	<10	<10	<10	<10	<10
Molybdenum	mg/kg	<1	<1	<1	<1	<1
Selenium	mg/kg	<2	<2	<2	<2	<2

Acid Extractable metals in soil				
Our Reference		356894-8	356894-19	356894-21
Your Reference	UNITS	10	D1/JCL	6 - [TRIPLICATE]
Depth		0-0.1	-	0-0.1
Date Sampled		16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil
Date prepared	-	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024	22/07/2024
Arsenic	mg/kg	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	5	4	<1
Copper	mg/kg	15	15	1
Lead	mg/kg	160	120	3
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	1	1	<1
Zinc	mg/kg	200	220	23
Iron	mg/kg	1,900	1,500	120
Manganese	mg/kg	65	68	<1
Beryllium	mg/kg	<1	<1	<1
Boron	mg/kg	<10	<10	<10
Molybdenum	mg/kg	<1	<1	<1
Selenium	mg/kg	<2	<2	<2

Moisture						
Our Reference		356894-1	356894-2	356894-3	356894-4	356894-5
Your Reference	UNITS	6	6	7	8	8
Depth		0-0.1	2	0-0.1	0-0.1	6
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024	22/07/2024	22/07/2024	22/07/2024
Moisture	%	5.4	4.5	5.1	10	4.7

Moisture					
Our Reference		356894-6	356894-7	356894-8	356894-19
Your Reference	UNITS	9	9	10	D1/JCL
Depth		0-0.1	0.5	0-0.1	-
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	22/07/2024	22/07/2024	22/07/2024	22/07/2024
Moisture	%	3.8	4.1	13	11

Asbestos ID - soils NEPM						
Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024	24/07/2024
Sample mass tested	g	640.44	778.54	555.05	962	613.53
Sample Description	-	Grey sandy soil	Grey sandy soil	Grey sandy soil	Grey sandy soil	Grey sandy soil
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	Chrysotile asbestos detected Crocidolite asbestos detected Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1	<0.1	<0.1	<0.1	1.0637
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	See Above
ACM >7mm Estimation*	g	—	—	—	—	0.6526
FA and AF Estimation*	g	—	—	—	—	—
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos comments	-	Nil	Nil	Nil	Nil	YES

Asbestos ID - soils NEPM		
Our Reference		356894-8
Your Reference	UNITS	10
Depth		0-0.1
Date Sampled		16/07/2024
Type of sample		Soil
Date analysed	-	24/07/2024
Sample mass tested	g	603.87
Sample Description	-	Grey sandy soil
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected
ACM >7mm Estimation*	g	—
FA and AF Estimation*	g	—
FA and AF Estimation*#2	%(w/w)	<0.001
Asbestos comments	-	Nil

Misc Inorg - Soil

Our Reference		356894-1	356894-3	356894-4	356894-6	356894-7
Your Reference	UNITS	6	7	8	9	9
Depth		0-0.1	0-0.1	0-0.1	0-0.1	0.5
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024	24/07/2024
Date analysed	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024	24/07/2024
pH 1:5 soil:water	pH Units	5.8	5.4	5.6	6.3	7.1
Electrical Conductivity 1:5 soil:water	µS/cm	15	11	50	42	20

Misc Inorg - Soil

Our Reference		356894-8	356894-16	356894-17	356894-18
Your Reference	UNITS	10	6	8	10
Depth		0-0.1	3	6	6
Date Sampled		16/07/2024	16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024
Date analysed	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024
pH 1:5 soil:water	pH Units	6.1	6.3	5.9	5.3
Electrical Conductivity 1:5 soil:water	µS/cm	52	3	2	14
Chloride, Cl 1:5 soil:water	mg/kg	[NA]	<10	<10	<10
Sulphate, SO4 1:5 soil:water	mg/kg	[NA]	<10	<10	10

PFAS in Soils Short				
Our Reference		356894-2	356894-5	356894-6
Your Reference	UNITS	6	8	9
Depth		2	6	0-0.1
Date Sampled		16/07/2024	16/07/2024	16/07/2024
Type of sample		Soil	Soil	Soil
Date prepared	-	19/07/2024	19/07/2024	19/07/2024
Date analysed	-	19/07/2024	19/07/2024	19/07/2024
Perfluorohexanesulfonic acid - PFHxS	µg/kg	<0.1	<0.1	<0.1
Perfluorooctanesulfonic acid PFOS	µg/kg	<0.1	<0.1	<0.1
Perfluorooctanoic acid PFOA	µg/kg	<0.1	<0.1	<0.1
6:2 FTS	µg/kg	<0.1	<0.1	<0.1
8:2 FTS	µg/kg	<0.2	<0.2	<0.2
Surrogate ¹³ C ₈ PFOS	%	112	108	109
Surrogate ¹³ C ₂ PFOA	%	100	104	101
Extracted ISTD ¹⁸ O ₂ PFHxS	%	106	101	103
Extracted ISTD ¹³ C ₄ PFOS	%	100	97	98
Extracted ISTD ¹³ C ₄ PFOA	%	106	100	112
Extracted ISTD ¹³ C ₂ 6:2FTS	%	108	105	142
Extracted ISTD ¹³ C ₂ 8:2FTS	%	133	107	160
Total Positive PFHxS & PFOS	µg/kg	<0.1	<0.1	<0.1
Total Positive PFOS & PFOA	µg/kg	<0.1	<0.1	<0.1
Total Positive PFAS	µg/kg	<0.1	<0.1	<0.1

Asbestos ID - materials						
Our Reference	UNITS	356894-9	356894-10	356894-11	356894-12	356894-13
Your Reference		9/0-0.6/F1	F1	F5	F8	F12
Depth		-	-	-	-	-
Date Sampled		16/07/2024	05/07/2024	05/07/2024	05/07/2024	05/07/2024
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	24/07/2024	24/07/2024	24/07/2024	24/07/2024	24/07/2024
Mass / Dimension of Sample	-	35x20x5mm	45x20x5mm	25x20x5mm	70x30x5mm	110x80x5mm
Sample Description	-	Grey fibre cement material	Grey fibre cement material	Grey fibre cement material	Grey fibre cement material	Brown organic fibrous board
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	No asbestos detected
		Amosite asbestos detected	Amosite asbestos detected	Amosite asbestos detected		Organic fibres detected
		Crocidolite asbestos detected				
Trace Analysis	-	[NT]	[NT]	[NT]	[NT]	No asbestos detected

Asbestos ID - materials				
Our Reference	UNITS	356894-14	356894-15	356894-20
Your Reference		F16	F17	9/0-0.6/F2
Depth		-	-	-
Date Sampled		05/07/2024	05/07/2024	16/07/2024
Type of sample		Material	Material	Material
Date analysed	-	24/07/2024	24/07/2024	24/07/2024
Mass / Dimension of Sample	-	70x50x5mm	66x40x5mm	60x40x5mm
Sample Description	-	Beige fibre cement material	Grey fibre cement material	Grey fibre cement material
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected
		Organic fibres detected	Amosite asbestos detected	Amosite asbestos detected
			Crocidolite asbestos detected	Crocidolite asbestos detected
Trace Analysis	-	No asbestos detected	[NT]	[NT]

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. NOTE#1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF relative to the sample mass tested) NOTE#2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "---" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Waters samples are filtered on receipt prior to analysis. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.
Org-029	Soil samples are extracted with basified Methanol. Waters and soil extracts are directly injected and/or concentrated/extracted using SPE. TCLPs/ASLP leachates are centrifuged, the supernatant is then analysed (including amendment with solvent) - as per the option in AS4439.3. Analysis is undertaken with LC-MS/MS. PFAS results include the sum of branched and linear isomers where applicable. Please note that PFAS results are corrected for Extracted Internal Standards (QSM 5.4 Table B-15 terminology), which are mass labelled analytes added prior to sample preparation to assess matrix effects and verify processing of the sample. PFAS analytes without a commercially available mass labelled analogue are corrected vs a closely eluting mass labelled PFAS compound. Surrogates are also reported, in this context they are mass labelled PFAS compounds added prior to extraction but are used as monitoring compounds only (not used for result correction). Envicarb (or similar) is used discretionally to remove interfering matrix components. Please contact the laboratory if estimates of Measurement Uncertainty are required as per WA DER.

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			22/07/2024	1	22/07/2024	22/07/2024		22/07/2024	22/07/2024
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	111	110
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	111	110
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	112	112
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	112	107
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	109	109
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	111	111
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	113	112
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	83	1	94	105	11	109	107

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			20/07/2024	1	20/07/2024	20/07/2024		20/07/2024	20/07/2024
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	93	89
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	92	87
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	86	126
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	93	89
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	92	87
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	86	126
Surrogate o-Terphenyl	%		Org-020	81	1	75	80	6	94	76

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	88
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	92
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	84
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	92
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	106
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	94
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	61
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	90	84
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	104	1	100	102	2	105	98

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	86
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	80
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	68
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	96
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	102
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	94
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	106
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	60	84
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	98
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	76
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	102	1	103	103	0	104	101

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	92
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	86
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	92
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	86
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	90
Fenthion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	88
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	104
Phosalone	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	102	1	103	103	0	104	101

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date extracted	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	111	100
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	100	1	102	97	5	100	94

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date prepared	-			19/07/2024	1	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			22/07/2024	1	22/07/2024	22/07/2024		22/07/2024	22/07/2024
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	105	100
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	96	92
Chromium	mg/kg	1	Metals-020	<1	1	<1	<1	0	100	96
Copper	mg/kg	1	Metals-020	<1	1	3	2	40	103	102
Lead	mg/kg	1	Metals-020	<1	1	6	4	40	100	95
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	94	90
Nickel	mg/kg	1	Metals-020	<1	1	2	<1	67	101	97
Zinc	mg/kg	1	Metals-020	<1	1	38	29	27	100	91
Iron	mg/kg	10	Metals-020	<10	1	1200	180	148	106	#
Manganese	mg/kg	1	Metals-020	<1	1	5	<1	133	110	96
Beryllium	mg/kg	1	Metals-020	<1	1	<1	<1	0	105	100
Boron	mg/kg	10	Metals-020	<10	1	<10	<10	0	100	##
Molybdenum	mg/kg	1	Metals-020	<1	1	<1	<1	0	99	93
Selenium	mg/kg	2	Metals-020	<2	1	<2	<2	0	100	95

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: Misc Inorg - Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	[NT]
Date prepared	-			24/07/2024	[NT]	[NT]	[NT]	[NT]	24/07/2024	[NT]
Date analysed	-			24/07/2024	[NT]	[NT]	[NT]	[NT]	24/07/2024	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	<10	[NT]	[NT]	[NT]	[NT]	113	[NT]
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	<10	[NT]	[NT]	[NT]	[NT]	110	[NT]

QUALITY CONTROL: PFAS in Soils Short						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-16	356894-6
Date prepared	-			19/07/2024	2	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Date analysed	-			19/07/2024	2	19/07/2024	19/07/2024		19/07/2024	19/07/2024
Perfluorohexanesulfonic acid - PFHxS	µg/kg	0.1	Org-029	<0.1	2	<0.1	<0.1	0	101	92
Perfluorooctanesulfonic acid PFOS	µg/kg	0.1	Org-029	<0.1	2	<0.1	<0.1	0	100	93
Perfluorooctanoic acid PFOA	µg/kg	0.1	Org-029	<0.1	2	<0.1	<0.1	0	80	79
6:2 FTS	µg/kg	0.1	Org-029	<0.1	2	<0.1	<0.1	0	91	89
8:2 FTS	µg/kg	0.2	Org-029	<0.2	2	<0.2	<0.2	0	92	99
Surrogate ¹³ C ₈ PFOS	%		Org-029	106	2	112	114	2	109	106
Surrogate ¹³ C ₂ PFOA	%		Org-029	98	2	100	95	5	99	100
Extracted ISTD ¹⁸ O ₂ PFHxS	%		Org-029	106	2	106	105	1	98	101
Extracted ISTD ¹³ C ₄ PFOS	%		Org-029	93	2	100	98	2	93	98
Extracted ISTD ¹³ C ₄ PFOA	%		Org-029	110	2	106	107	1	106	110
Extracted ISTD ¹³ C ₂ 6:2FTS	%		Org-029	107	2	108	98	10	103	133
Extracted ISTD ¹³ C ₂ 8:2FTS	%		Org-029	102	2	133	111	18	112	143

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

For PFAS Extracted Internal Standards denoted with # or outside the 50-150% acceptance range, the respective target analyte results may be unaffected, in other circumstances the PQL has been raised to accommodate the outlier(s).

Acid Extractable Metals in Soil:

-The laboratory RPD acceptance criteria has been exceeded for 356894-1 for Fe. Therefore a triplicate result has been issued as laboratory sample number 356894-21.

-# Percent recovery is not applicable due to the high concentration of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

-## Poor spike recovery was obtained for this sample. Sample matrix interference is suspected. However, an acceptable recovery was obtained for the LCS.

Asbestos-ID in soil: NEPM

This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Factual description of asbestos identified in the soil samples: NEPM

Sample 356894-7; Chrysotile & Crocidolite asbestos identified in 4.3509g of fibre cement material >7mm

CERTIFICATE OF ANALYSIS 356894-A

Client Details

Client	Douglas Partners Newcastle
Attention	Jason Lambert
Address	Box 324 Hunter Region Mail Centre, Newcastle, NSW, 2310

Sample Details

Your Reference	<u>227295.00 Nelson Bay</u>
Number of Samples	Additional TCLP Testing
Date samples received	18/07/2024
Date completed instructions received	26/07/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	29/07/2024
Date of Issue	29/07/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Asbestos Approved By

Analysed by Asbestos Approved Analyst:
Authorised by Asbestos Approved Signatory:

Results Approved By

Loren Bardwell, Development Chemist
Timothy Toll, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

TCLP Preparation - Acid		
Our Reference		356894-A-8
Your Reference	UNITS	10
Depth		0-0.1
Date Sampled		16/07/2024
Type of sample		Soil
pH of soil for fluid# determ.	pH units	6.5
pH of soil TCLP (after HCl)	pH units	1.8
Extraction fluid used		1
pH of final Leachate	pH units	4.9

Metals from Leaching Fluid pH 2.9 or 5		
Our Reference		356894-A-8
Your Reference	UNITS	10
Depth		0-0.1
Date Sampled		16/07/2024
Type of sample		Soil
Date extracted	-	29/07/2024
Date analysed	-	29/07/2024
Lead	mg/L	0.2

Method ID	Methodology Summary
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using AS 4439. Please note that the mass used may be scaled down from default based on sample mass available. Samples are stored at 2-6oC before and after leachate preparation.
Metals-020	Determination of various metals by ICP-AES following buffer determination as per USEPA 1311 and hence AS 4439.3. Extraction Fluid 1 refers to the pH 5.0 buffer and Extraction Fluid 2 is the pH 2.9 buffer.

Client Reference: 227295.00 Nelson Bay

QUALITY CONTROL: Metals from Leaching Fluid pH 2.9 or 5						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			29/07/2024	[NT]	[NT]	[NT]	[NT]	29/07/2024	[NT]
Date analysed	-			29/07/2024	[NT]	[NT]	[NT]	[NT]	29/07/2024	[NT]
Lead	mg/L	0.03	Metals-020	<0.03	[NT]	[NT]	[NT]	[NT]	104	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

[illegible]

* Default storage: glass containers in fridge, plastic containers shelved, ASS in freezer, water samples in fridge

A Provide name of Lab 1 *Resid lab -*

B Provide name of Lab 2

C Provide name of Lab 3

Project No: 227295.00	Suburb: Nelson Bay	To: Envirolab Services
Project Manager: Kate Fulham	Order Number: NC232952	12 Ashley St, Chatswood NSW 2067
Email: Kate.Fulham@douglaspartners.com.au	Sampler: <i>SC</i>	Attn: Sample Receipt
Turnaround time: ☒ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day		(02) 9910 6200 samplereceipt@envirolab.com

Prior Storage: ☒ Fridge ☐ Freezer ☒ Esky ☐ Shelf **Do samples contain 'potential' HBM?** ☐ No ☒ YES, handle, transport, store in accordance with FPM HAZID)

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes										Notes/ Preservation/ Additional Requirements
	Location/ Other ID	Depth From	Depth To				S - soil W - water M - Material	G - glass P - plastic	Combo 6	pH + EC	PFAS - short suite	Asbestos ID (500ml)	Asbestos ID (fragment)	Aggressivity			
1	6	0	0.1	16/07/24	S	G,P	x	x				x					
2	6	2.0	-	16/07/24	S	P					x						
3	7	0	0.1	16/07/24	S	G,P	x	x				x					
4	8	0	0.1	16/07/24	S	G,P	x	x				x					
5	8	6.0	-	16/07/24	S	P					x						
6	9	0	0.1	16/07/24	S	G,P	x	x			x						
7	9	0.5	-	16/07/24	S	G,P	x	x			x						
8	10	0	0.1	16/07/24	S	G,P	x	x			x						
9	9/0-0.6/F1	-	-	16/07/24	M	P							x				
10	9/0-0.6/F2	-	-	16/07/24	M	P							x				
11	F1	-	-	5/07/24	M	P							x				
12	F5	-	-	5/07/24	M	P							x				
13	F8	-	-	5/07/24	M	P							x				
14	F12	-	-	5/07/24	M	P							x				
15	F16	-	-	5/07/24	M	P							x				
16	F17	-	-	5/07/24	M	P							x				
17	6	3	-	16/07/24	S	G								x			
18	8	6	-	16/07/24	S	G								x			
19	10	6	-	16/07/24	S	G								x			
20	D1/JCL	-	-	16/07/24	S	G	x										

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

Job No: 356894

Date Received: 18/7/24
Time Received: 1045
Received By: GR
Temp: Cool/Ambient
Cooling: Ice/Repack
Security: Intact/Broken/None

Metals to analyse: As, Cd, Cr, Cu, Hg, Ni, Zn, Pb, Fe, Mn, Be, B, Mo, Se		LAB RECEIPT	
Number of samples in container:		Lab Ref. No:	
Send results to: Douglas Partners Pty Ltd		Received by:	
Address: 15 Callistemon Close, Warabrook NSW 2874		Date & Time:	
Relinquished by: <i>SC</i>		Signed:	
Phone: (02) 4960 9600		Date: 17/6/24	

Project No: 227295						Client Project Name: Proposed Residential Development							
Client: Fortezza Group Pty Ltd						Location: 5-7 Church Street & 42 Donald Street, Nelson Bay							
Project Manager: KMF						DP Lab Received		By: JLU		Date: 16/7/24			
Do samples contain 'potential' HBM? Yes ☒ No ☐ (If YES, then handle, transport and store in accordance with FPM HAZID)													
Field									DP Lab	For Despatch to			Notes
Sample ID	Depth (m)	Duplicate Sample	Sample Type S - soil W - water	Container Type G - glass P - plastic	ASS Samples	Sampling			Storage Locn *	Lab 1 ^A	Lab 2 ^B	Lab 3 ^C	
						By	Date	Time		Date	Date	Date	
6	0-0.1		S	G, P		JLU	16/7/24	0800	PRADOL	17/6/24			+ 500ml FPMAS + B
	0.5												
	1.0												+ PPMAS
	2.0												
	3.0												
	4.0												
	5.0												
✓	6.0												+ PPMAS
7	0-0.1												+ PPMAS + B
	0.5												
	1.0												
	2.0												
	3.0												
	4.0												
	5.0												
✓	6.0							1100					

* Default storage: glass containers in fridge, plastic containers shelved, ASS in freezer, water samples in fridge

A Provide name of Lab 1 *EnviroLab*

B Provide name of Lab 2

C Provide name of Lab 3

Project No: 227295						Client Project Name: Proposed Residential Development							
Client: Fortezza Group Pty Ltd						Location: 5-7 Church Street & 42 Donald Street, Nelson Bay							
Project Manager: KMF						DP Lab Received		By: JLL		Date: 16/7/24			
Do samples contain 'potential' HBM? Yes ☒ No ☐ (If YES, then handle, transport and store in accordance with FPM HAZID)													
Field									DP Lab	For Despatch to			Notes
Sample ID	Depth (m)	Duplicate Sample	Sample Type	Container Type	ASS Samples	Sampling			Storage Locn *	Lab 1 ^A	Lab 2 ^B	Lab 3 ^C	
			S - soil W - water	G - glass P - plastic		By	Date	Time		Date	Date	Date	
8	0-0.1		S	G, P		JLL	16/7/24	0800	FD002	17/7/24			+ PFAS + B
	0.5												
	1.0												
	2.0												+ PFAS
	3.0												
	4.0												
	5.0												
✓	6.0									✓			+ PFAS
9	0-0.1									✓			+ PFAS
	0.5												
	1.0												
	2.0												+ PFAS
	3.0												
	4.0												
✓	5.0												
	6.0							1100					+ PFAS

* Default storage: glass containers in fridge, plastic containers shelved, ASS in freezer, water samples in fridge

A Provide name of Lab 1 *Enduro*

B Provide name of Lab 2

C Provide name of Lab 3

Project No: 227295						Client Project Name: Proposed Residential Development							
Client: Fortezza Group Pty Ltd						Location: 5-7 Church Street & 42 Donald Street, Nelson Bay							
Project Manager: KMF						DP Lab Received		By: JLL		Date: 16/7/24			
Do samples contain 'potential' HBM? Yes ☒ No ☐ (If YES, then handle, transport and store in accordance with FPM HAZID)													
Field									DP Lab	For Despatch to			Notes
Sample ID	Depth (m)	Duplicate Sample	Sample Type	Container Type	ASS Samples	Sampling			Storage Locn *	Lab 1 ^A	Lab 2 ^B	Lab 3 ^C	
			S - soil W - water	G - glass P - plastic		By	Date	Time		Date	Date	Date	
10	0.0.1	01/JLL	S	G.P		JLL	16/7/24	0800	FRIDGE	17/7/24			+ PPA + B
	0.5												
	1.0												
	2.0												
	3.0												
	4.0												
	5.0												
	6.0							1100					

* Default storage: glass containers in fridge, plastic containers shelved, ASS in freezer, water samples in fridge

A Provide name of Lab 1 *ANALYSIS*

B Provide name of Lab 2

C Provide name of Lab 3

Project No: 227295-00	Client Project Name: Proposed Resignation Dev
Client: Forterra Group Pty Ltd	Location:
Project Manager: KMF	DP Lab Received By: 16/7/24 Date: 16/7/24
Do samples contain 'potential' HBM? Yes ☒ No ☐ (If YES, then handle, transport and store in accordance with FPM HAZID)	

Field									DP Lab	For Despatch to			Notes
Sample ID	Depth (m)	Duplicate Sample	Sample Type	Container Type	ASS Samples	Sampling			Storage Locn *	Lab 1 ^A	Lab 2 ^B	Lab 3 ^C	
			S - soil W - water	G - glass P - plastic		By	Date	Time		Date	Date	Date	
F1			Plastic	P		JL	5/7/24	0900		17/7/24 Date			
F2													
F3													
F4													
F5													
F6													
F7													
F8													
F9													
F10													
F11													
F12													
F13													
F14													
F15													
F16													
F17													
F18													

* Default storage: glass containers in fridge, plastic containers shelved, ASS in freezer, water samples in fridge

A Provide name of Lab 1 Envidas-

B Provide name of Lab 2

C Provide name of Lab 3

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Newcastle
Attention	Kate Fulham

Sample Login Details

Your reference	227295.00 Nelson Bay
Envirolab Reference	356894
Date Sample Received	18/07/2024
Date Instructions Received	18/07/2024
Date Results Expected to be Reported	25/07/2024

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	12 Soil, 8 Material
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	6
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

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

Analysis Underway, details on the following page:

Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metals in soil	Asbestos ID - soils NEPM	Misc Inorg - Soil	PFAS in Soils Short	Asbestos ID - materials
6-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6-2										✓	
7-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
8-6										✓	
9-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
9-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓		
10-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
9/0-0.6/F1											✓
F1											✓
F5											✓
F8											✓
F12											✓
F16											✓
F17											✓
6-3									✓		
8-6									✓		
10-6									✓		
D1/JCL	✓	✓	✓	✓	✓	✓	✓				
9/0-0/6/F2											✓

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Appendix J

Data quality report (QAQC)

Table QA1 – Relative Percentage Difference Results
– Soil Sampling

1. Field and Laboratory Data Quality Assurance and Quality Control

The field and laboratory data quality assurance and quality control (QA/QC) procedures and results are summarised in the following Table 1. Reference should be made to the field work methodology and the laboratory results / certificates of analysis for further details. The relative percentage difference (RPD) results, along with the other field QC samples are included in the summary results tables.

Table 1: Field and laboratory quality control

Item	Evaluation / acceptance criteria	Compliance
Analytical laboratories used	NATA accreditation	C
Holding times	Various based on type of analysis	C
Intra-laboratory replicates	10% of primary samples; <30% RPD	PC
Laboratory / Reagent Blanks	1 per batch; <PQL	C
Laboratory Duplicate	1 per lab batch; As laboratory certificate	PC
Matrix Spikes	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Surrogate Spikes	All organics analysis; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Control Samples	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Standard Operating Procedures (SOP)	Adopting SOP for all aspects of the sampling field work	C

Notes:

C = compliance; PC = partial compliance; NC = non-compliance

Intra-laboratory duplicate

The RPD results were all within the acceptable range, with the exception of those indicated in Table QA1 (results in bold). These exceedances, however, are not considered to be of concern as:

- The actual differences in the concentrations of the replicate pairs where RPD exceedances occurred were typically low;
- The replicate pairs were collected from fill soils which by its nature are heterogeneous;
- Replicates, rather than homogenised duplicates, were used to minimise risk of volatile loss, hence greater analytical variability between replicate pairs can be expected;
- Most of the recorded concentrations were relatively close to the PQL;
- The majority of RPD results from a replicate pair were within the acceptable limits; and

- All other QA/QC parameters met the data quality indicators.

Laboratory duplicate

The RPD results were all within the acceptable range except for copper, lead, nickel, iron, manganese in 6/0-0.1m. These exceedances are not, however, considered to be of concern given that:

- The actual differences in the concentrations of the replicate pairs where RPD exceedances occurred were typically low (except for iron);
- The replicate pairs were collected from fill soils which by its nature are heterogeneous;
- Replicates, rather than homogenised duplicates, were used to minimise risk of volatile loss, hence greater analytical variability between replicate pairs can be expected;
- The recorded concentrations are at least one order of magnitude away from site assessment criteria; and
- All other QA/QC parameters met the data quality indicators.

In summary, the QC data is determined to be of sufficient quality to be considered acceptable for the assessment.

2. Data Quality Indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQI) as outlined in NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013):

- Completeness: a measure of the amount of usable data from a data collection activity;
- Comparability: the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness: the confidence (qualitative) of data representativeness of media present on-site;
- Precision: a measure of variability or reproducibility of data; and
- Accuracy: a measure of closeness of the data to the 'true' value.

Table 2: Data quality indicators

Data quality indicator	Method(s) of achievement
Completeness	Target locations sampled.
	Preparation of borehole logs, sample location plan and chain of custody records.
	Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody.
	Samples analysed for contaminants of potential concern (COPC) identified in the conceptual site model (CSM).
	Completion of chain of custody (COC) documentation.
	NATA accredited laboratory results certificates provided by the laboratory.
	Satisfactory frequency and results for field and laboratory quality control (QC) samples.
Comparability	Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project.
	Experienced sampler(s) used.
	Use of NATA registered laboratories, with test methods the same or similar between laboratories.
	Satisfactory results for field and laboratory QC samples.
Representativeness	Target media sampled.
	Sample numbers recovered and analysed are considered to be representative of the target media and complying with DQO.
	Samples were extracted and analysed within holding times.
	Samples were analysed in accordance with the COC.
Precision	Field staff followed standard operating procedures.
	Acceptable RPD between original samples and replicates.
	Satisfactory results for all other field and laboratory QC samples.
Accuracy	Field staff followed standard operating procedures.
	Satisfactory results for all field and laboratory QC samples.

Based on the above, it is considered that the DQI have been generally complied with.

3. Conclusion

Based on the results of the field QA and field and laboratory QC, and evaluation against the DQI it is concluded that the field and laboratory test data obtained are reliable and useable for this preliminary assessment.

4. References

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

[illegible]