

**PHASE 1 ENVIRONMENTAL SITE
ASSESSMENT, BLOCK 1, SECTION 7,
REID AND BLOCK 1, SECTION 52 AND
BLOCK 1, 3, 4, 7, SECTION 57, BRADDON,
ACT**

Prepared for:

Purdon Associates Pty Ltd
3/9 McKay Street
Turner ACT 2612

Report Date: 16 June 2010
Project Ref: ENVICANB00347AA

Written/Submitted by:



Thomas Harding
Hydrogeologist

Reviewed/Approved by:



Michelle Battam
Business Manager - ACT

Reviewed/Approved by:



Tot Le
Principal

16 June 2010

Purdon Associates Pty Ltd
3/9 McKay Street
Turner ACT 2612

Attention: Mr Rob Purdon

Dear Rob

RE: Phase 1 Environmental Site Assessment, Block 1 Section 7, Reid, Block 1, Section 52 and Block 1, 3, 4, 7, Section 57, Braddon, ACT

This report presents the Phase 1 Environmental Site Assessment for Block 1 Section 7, Reid, Block 1, Section 52 and Block 1, 3, 4, 7, Section 57, Braddon, ACT. Your attention is drawn to the enclosed sheet entitled "*Important Information About Your Coffey Environmental Report*", which should be read in conjunction with this report. Please note that Coffey are yet to receive information from ACT work cover dangerous goods storage at the site. This is not expected to alter the outcomes of this report.

Please do not hesitate to contact the undersigned should you have any questions regarding this report.

For and on behalf of Coffey Environments Pty Ltd



Michelle Battam
Business Manager ACT

RECORD OF DISTRIBUTION

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ABBREVIATIONS

ACTPLA	ACT Planning and Land Authority
AEC	Area of Environmental Concern
ANZECC	Australian and New Zealand Environment and Conservation Council
bgs	below ground surface
BH	Borehole
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
DGU	Dangerous Goods Unit (ACT Workcover)
EPU	Environment Protection Unit
ESA	Environmental Site Assessment
L/sec	Litres per second
NEPM	National Environmental Protections Measures
NSW EPA	Environment Protection Authority of New South Wales
PAH	Polycyclic Aromatic Hydrocarbons
PAECs	Potential Area of Environmental Concern
PCOCs	Potential Contaminants of Concern
ppm	parts per million
TaMS	ACT Department of Territory and Municipal Services
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons

Coffey Environments Pty Ltd (Coffey) was commissioned by Purdon Associates Pty Ltd (Purdon Associates) to undertake a Phase 1 ESA for a proposed redevelopment at Block 1 Section 7, Reid, Block 1, Section 52 and Block 1, 3, 4, 7, Section 57, Braddon, ACT

Based on the results of the Phase 1 ESA it was established that:

- Block 1 Section 52 and Block 1 Section 7 contain apartments which have eight residential complexes and associated playgrounds for children. Block 1, Section 52 is a single multi-storey residential complex, which is in poor repair. The site has a garage area and damaged access road to the west of the building;
- A garden area is located to the east of Block 1, Section 52 which is in poor condition and has several areas where trees have been removed and the ground has subsided;
- Block 7, Section 57 contains a church and concrete car park located at the rear of the block;
- Block 1, Section 57 contains The Sisters of Mercy residence has a gravel car park, garage and garden area at the rear of the property;
- Block 3, Section 57 is the access road between Currong Street and Cooyong Street.
- Title information for the sites four of the six blocks did not provide any information regarding the previous site uses. No title information is available for Block 3, Section 57, Braddon and Block 1, Section 7, Reid.
- Potential onsite sources on contamination include possible underground storage tanks (USTs) at Block 1, Section 7 and Blocks 1, 4, 7 Section 57 and use of diesel and/or heating oil. The contaminated land searches indicated boiler heating or similar systems in large residential unit complexes were used prior to the 1980's. The potential chemicals of concern including Total Petroleum Products (TPH), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs). It should be noted that the dangerous goods information has not yet been received for the sites, and this may provide further information.
- An additional potential onsite source of contamination may be from asbestos contained in building material during the demolition of a T-shaped building south of the church on Block 7 Section 57 between 1994 and 2004. The material contained in the previous building is unknown.
- Based on observations during the site walkover, there are no offsite sources of contamination in the general vicinity of the site.

Based on the above conclusions, Coffey Environments recommends a Phase 2 ESA at Block 1, Section 7, Reid and Block 1, Section 52 and Blocks 1, 4, 7 Section 57, Braddon to investigate the potential areas of concern with respect to the possible USTs. Additionally, the Phase 2 ESA should include the assessment of Block 7, Section 57, Braddon for potential asbestos contamination within the shallow soils.

1 INTRODUCTION

1.1 General

Coffey Environments Pty Ltd (Coffey) was commissioned by Purdon Associates to undertake a Phase 1 Environmental Site Assessment (ESA) for a proposed redevelopment at Block 1 Section 7, Reid, Block 1, Section 52 and Block 1, 3, 4, 7, Section 57, Braddon, ACT (the site).

The work was commissioned by Mr Rob Purdon of Purdon Associates on the 26 May 2010.

The site currently consists of three residential complexes, a church, a parish residence and a commercial property. Information from the ACT Planning Authority (ACTPLA) indicates that the site is zoned as community and residential according to the Territory Plan.

1.2 Objectives

The objectives of the Phase 1 ESA are to undertake a historical information search on the sites to assess the potential areas of environmental concern and potential chemicals of concern (if any), and provide recommendations on further investigation (if required) to render the sites suitable for the proposed development.

1.3 Scope of Works

The scope of works for this Phase 1 ESA included a review of the site history, assessment of data and reporting as outlined below.

- A site visit by a Coffey Environmental Engineer/Scientist to visually assess potential sources of contamination, visually assess property boundaries, observe surrounding land uses, topography, drainage, and nearby sensitive environments;
- A review of aerial photographs;
- Review of ACT EPU records for the sites (including contaminated land searches);
- Review of Title information for the sites;
- Review of information held by ORS Workcover;
- Interviews with the people familiar with the history and operations of the sites (if available);
- Review and collation of the above information and identification of potential Areas of Environmental Concern (PAECs) and potential Chemicals of Concern (PCoCs); and
- Recommendations (if required).

2 SITE LAND USE AND DESCRIPTION

2.1 Site Land Use

The sites are referred to as Block 1 Section 7, Reid, Block 1, Section 52 and Block 1, 3, 4, 7, Section 57, Braddon, ACT and have an area of approximately 18,327 square metres (m²). All of the blocks are bounded by Cooyong Street to the west. Blocks 1, 4, 7 Section 57 are bounded by Donaldson Street to the north, Currong Street to the east and Ainslie Avenue to the south. Block 1 Section 7 is south of Ainslie Avenue, with Kogarah Lane to the east and Boolee Street to the south of the block. There is also an access road (Block 3) between Section 57 Blocks 4 and 7 and Block 1 Section 52. An access road was also observed during the site walkover on 4 June 2010.

A site location plan is attached as Figure 1.

Section 57 consists of Blocks 1, 3, 4, 7 with a Roman Catholic Church (Block 7) and associated nunnery (Sisters of Mercy) (Block 1), a commercial property with residential housing attached (Block 4). Section 52 consists of two apartment blocks (Currong apartments and Allawah apartments). Section 7 Block 1 is the Bega apartment complex.

2.2 Geology and Hydrogeology

2.2.1 Geology

The 1:50,000 Geology Map of Canberra, Queanbeyan and Environs (Bureau of Mineral Resources, 1980) indicates that the site is located over Quaternary colluviums, consisting of conglomerate and poorly cemented gravel and sand conglomerate and ferruginous quartz pebble conglomerate.

Late Middle Silurian mudstone, siltstone, minor sandstone, limestone, hornfels, dacite, ignimbrite and volcaniclastic sediments underlies the Quaternary sequences.

2.2.2 Hydrogeology

The 1:100,000 Geology Map of the ACT and Environs (Bureau of Mineral Resources, 1984) indicates that aquifers in the study area are likely to have yields generally between 0.5 and 1.0 L/s and total dissolved solids (TDS) of less than 500 mg/L.

Sullivans Creek is the nearest receiving environment of water from the sites. The creek drains water from the nearby northern suburbs of the ACT into Lake Burley Griffin and is situated approximately 1.3km west of the sites. Depth to groundwater beneath the sites is estimated to be 8.0m below ground surface (bgs) based on the groundwater bore search conducted.

2.3 Groundwater Bore Search

A groundwater bore search conducted on the 1 June 2010 indicate that there are three privately managed water bores registered under the water resources act 2007 within 1km of the sites. These are listed below;

- Bore no: 178, Construction date: unknown, Depth of bore: unknown
- Bore no: 345, Construction date: 17 Aug 2004, Depth of bore: 60 metres

- Bore no: 550, Construction date: unknown, Depth of bore: unknown

The uses of these three bores are unknown and there was no information regarding the standing water levels or yields. Additionally, numerous monitoring bore are located in Bunda Street, approximately 200m from the site (M. Heckenburg, EPU email, 2 June 2010).

2.4 Topography

Information obtained from the 1: 25,000 Canberra Topographic and Orthophoto Map 8727-III-N First Edition (Central Mapping Authority NSW, 1980) indicates the sites are approximately 565 m above the Australian Height Datum (AHD). The local site topography is relatively flat. Drainage is channelled towards the boundaries of each of the blocks and into stormwater drains.

2.5 Surrounding Land Use

The land surrounding the sites are generally used for commercial purposes and was as follows:

- North – Donaldson Street and a football club and associated playing fields beyond, approximately 70m north;
- East – Currong Street and residential housing;
- South – Boolee Street and a Lutheran Church, approximately 65m south;
- West – Cooyong Street and a shopping centre beyond.

Sensitive receptors within a 500m radius of the site include:

- Users of a football club and oval are to the north;
- The nunnery onsite appears to grow vegetables in the garden of the church;
- Occupiers of residential housing to the east; and
- Three groundwater bores that are within 1km of the site. None are within 500m of the sites.

2.6 Site Observations

A representative from Coffey Environments visited the sites on 4 June 2010. At the time of the inspection the sites included three apartment complexes with associated playgrounds, two access roads to the residential properties, a church and nunnery and a commercial/residential building.

The sites consist of bitumen, concrete or buildings with concrete curbs and grass making up garden beds;

- Large deciduous trees were present at each block;
- The church consisted of a single storey brick building and a two-storey concrete office building. The block has a bitumen car park, in good condition with minor cracking;
- The Sisters of Mercy nunnery consisted of a single two-storey brick building with gardens and gravel car park. A garage was also present which had a hydrocarbon odour emanating from within it, the potential source is unknown. The gardens at the back of the property appeared to have vegetables growing;

- A commercial building, consisting of several residential houses is to the south of the Sisters of Mercy residence. The property is a one-storey brick building with a garage. A bitumen and gravel car park is located adjacent to Currong Street, with large deciduous trees on the boundary of the site to the north.
- The car park has several scars and stormwater drainage through the middle of the sites;
- The commercial building has a courtyard with a picnic and seating area and is grass covered;
- An access road runs perpendicular with the blocks between the church and commercial buildings and the apartment blocks. The road is in good condition with some minor cracks and concrete curbs. There appears to be several utilities that run along this access road;
- Section 52 Block 1 (Currong Apartments) are to the south of the access road and is a single concrete and wood multi-storey building;
- The concrete and wood is in poor condition, with rotten windows and cracked concrete throughout the complex;
- Large cracks observed in the southeast area in the car park and access road to Currong Apartments;
- Two man hole covers were observed at Section 52 Block 1, possibly for now disused USTs;
- A large trench scar crosses the car park at the centre of the apartment block (Section 52 Block 1);
- Bins in poor condition at all three pick up points (Section 52 Block 1);
- On the eastern side of Section 52 Block 1 there is a grassed area with large deciduous trees and bushes. At several locations the ground appears disturbed and sunken;
- Section 52 Block 1 (Allawah apartments) consist of five brick buildings with two playgrounds and BBQ areas separating them and also three more blocks perpendicular to these to the west. A small concrete footpath in good condition separated the blocks and rises to the east by approximately 2m. This area between is a stormwater drainage;
- All the buildings in Section 57 Block 1 are in good condition and the playground facilities are also in good condition;
- A concrete car park is located under the three blocks, which are adjacent to Cooyang Street. Three hydrocarbon stains were observed on the concrete across the site, associated with the car park;
- Illegally dumped material consisting of wood and electronics was observed at several locations across the whole complex;
- Section 7 Block 1 (Bega apartments) consist of five brick buildings with two playgrounds and BBQ areas separating them and also three more blocks perpendicular to these to the west. A small concrete footpath in good condition separated the blocks and rises to the east by approximately 2m. This area between is a stormwater drainage;
- All the buildings are in good condition and the playground facilities are also in good condition;
- A concrete car park is located under the three blocks which are adjacent to Cooyang Street. Three hydrocarbon stains were observed on the concrete across the site, associated with the car park;

- Illegally dumped material consisting of wood, tyres and electronics was observed at several locations across the whole complex;

Site photographs are presented in Appendix A.

2.7 Aerial Photograph Review

The main observations from a review of the aerial photographs obtained from ACT Planning and Land Authority (ACTPLA) are summarised in Table 2. Copies of photographs are presented in Appendix B.

Table 2: Review of Aerial Photographs

Year Of Photo	Site Description	Surrounding Area Description
Dated 29/11/1950 Run 5 Print 197	<ul style="list-style-type: none"> • Church Structure is already visible. The rest of the sites are vacant • One large rectangular structure and four smaller buildings are just south of the church • One large building in the eastern area of the site • The land appears to have been just cleared 	<ul style="list-style-type: none"> • Vacant blocks to the south and the west of the site. • Trees are along Donaldson Street in a north with the football oval just beyond. • Residential housing is to the east
Dated 10/1/1965 Run 84 Print 179	<ul style="list-style-type: none"> • The current sisters of mercy building is now built in the northern most block • A T-shaped building has replaced the earlier five structures south of the church • All three of the residential blocks have been built • There is grass and trees south of the church and sisters of mercy buildings 	<ul style="list-style-type: none"> • Most of Canberra has now been built • Vacant land to the West • More trees have been planted to the north of the church around the football oval • There appears to be a large building on the block west of Bega Apartments (Block 1 Section 7)
Dated 25/2/1972 Run 7 Print 87	<ul style="list-style-type: none"> • A car park has been built behind the sisters of mercy building 	<ul style="list-style-type: none"> • Construction of car parks to the west of the sites
Dated 28/2/1981 Run 13 Print 255	<ul style="list-style-type: none"> • No change 	<ul style="list-style-type: none"> • There is now housing to the east of Bega apartments (Block 1 Section 7)
Dated 4/4/1991 Run 13 Print 63	<ul style="list-style-type: none"> • The current commercial/residential property is now present at the centre of Block 4 Section 57 behind the sisters of mercy house. 	<ul style="list-style-type: none"> • More housing has been built to the east of Bega apartments (Block 1 Section 7)

Year Of Photo	Site Description	Surrounding Area Description
Dated 6/5/2004 Run 9 Print 97	<ul style="list-style-type: none"> • The T-shaped building is now gone and has been replaced by the current office block just south of the church. • Behind the church the grass has been replaced with a car park 	<ul style="list-style-type: none"> • No change

2.8 Government Record Searches

A Contaminated Land Search of records held by the EPU was conducted on the 2 June 2010 and indicates the following for each of the Blocks:

Block 1 Section 7, Reid:

The block is not recorded on the Register of contaminated sites under section 21(A) of the Environment Protection Act 1997.

The EPU indicated that the site is a large residential unit complex. Prior to the introduction of natural gas to the ACT in the 1980's, the site utilised a boiler heating or similar system. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

At present the EPU has no information on the contamination of the above block other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as warranty that there is no contamination

Block 1 Section 52, Braddon:

The block is not recorded on the Register of contaminated sites under section 21(A) of the Environment Protection Act 1997.

The EPU indicated that hazardous materials were located within Block 1 Section 52 Braddon from the operation of a former underground fuel tank. The EPU has records indicating that the fuel storage facilities have been removed but has no record of an environmental assessment of the site.

At present the EPU has no information on the contamination of the above block other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as warranty that there is no contamination

Blocks 1, 4, 7 Section 57, Braddon:

The block is not recorded on the Register of contaminated sites under section 21(A) of the Environment Protection Act 1997.

The sites are currently occupied by commercial building. Commercial complexes prior to the introduction of natural gas to the ACT in the 1980's utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

At present the EPU has no information on the contamination of the above block (s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as warranty that there is no contamination.

Block 3 Section 57, Braddon:

The block is not recorded on the Register of contaminated sites under section 21(A) of the Environment Protection Act 1997.

At present the EPU has no information on the contamination of the above block (s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as warranty that there is no contamination

The contaminated land searches are located in Appendix C.

2.9 Titles

Coffey Environments commissioned a search of historical titles to gain a list of previous registered proprietors. A copy of the historical titles, including a summary of registered proprietors, is included in Appendix A. The registered proprietors are summarised in the table below:

Site	Deposit Plan	Commencement of Lease
Section 52 Block 1	DP 5881	16/12/1987
Section 57 Block 7	DP 7873	19/07/1991
Section 57 Block 4	DP 5906	19/07/1991
Section 57 Block 1	DP 713	01/12/1999

No further information is provided as part of the title search regarding previous site uses and no title information is available for Block 3, Section 57, Braddon and Block 1, Section 7, Reid.

2.10 Gaps in Information

A search of the Work Cover Records has been ordered however, the client requested this draft report issued prior to the Work Cover search being completed. The contaminated land search indicates boiler heating or similar systems in large residential unit complexes prior to the 1980's and Block 1, Section 7 and Blocks 1, 4, 7 Section 57 are suspected of USTs for diesel and/or heating oil due to this.

3 POTENTIAL AREAS AND CHEMICALS OF ENVIRONMENTAL CONCERN

3.1 On Site Sources of Contamination

The contaminated land search indicates boiler heating or similar systems in large residential unit complexes prior to the 1980's and Block 1, Section 7 and Blocks 1, 4, 7 Section 57 are suspected of USTs for diesel and/or heating oil due to this. During the site inspection conducted on the 4 June 2010, two manhole locations were observed on Block 1, Section 52 which appear to be UST locations and could be areas that have potential chemicals of concern including Total Petroleum Products (TPH), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs).

A review of the historical aerial photographs indicates that a T-shaped building south of the church on Block 7 Section 57 was demolished between 1994 and 2004 and a new block was rebuilt. The material contained in the previous building is unknown and potential asbestos material may have been present in the old building. Therefore, asbestos may be a potential contaminant on Block 7, Section 57.

3.2 Potential Off Site Sources of Contamination

The site walkover indicated that there are no potential contamination sources from offsite. Records from the Environment Protection Unit indicate that there is no off site contamination sources present within the vicinity of the site.

4 SUMMARY AND CONCLUSION

Based on the above results of the Phase 1 ESA it can be concluded that:

- Block 1 Section 52 and Block 1 Section 7 contain apartments which have eight residential complexes and associated playgrounds for children. Block 1, Section 52 is a single multi-storey residential complex, which is in poor repair. The site has a garage area and damaged access road to the west of the building;
- A garden area is located to the east of Block 1, Section 52 which is in poor condition and has several areas where trees have been removed and the ground has subsided;
- Block 7, Section 57 contains a church and concrete car park located at the rear of the block;
- Block 1, Section 57 contains The Sisters of Mercy residence has a gravel car park, garage and garden area at the rear of the property;
- Block 3, Section 57 is the access road between Currong Street and Cooyong Street.
- Title information for the sites four of the six blocks did not provide any information regarding the previous site uses. No title information is available for Block 3, Section 57, Braddon and Block 1, Section 7, Reid.
- Potential onsite sources on contamination include possible underground storage tanks (USTs) at Block 1, Section 7 and Blocks 1, 4, 7 Section 57 and use of diesel and/or heating oil. The contaminated land searches indicated boiler heating or similar systems in large residential unit complexes were used prior to the 1980's. The potential chemicals of concern including Total Petroleum Products (TPH), Benzene, Toluene, Ethylbenzene and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs). It should be noted that the dangerous goods information has not yet been received for the sites, and this may provide further information.
- An additional potential onsite source of contamination may be from asbestos contained in building material during the demolition of a T-shaped building south of the church on Block 7 Section 57 between 1994 and 2004. The material contained in the previous building is unknown.
- Based on observations during the site walkover, there are no offsite sources of contamination in the general vicinity of the site.

Based on the above conclusions, Coffey Environments recommends a Phase 2 ESA at Block 1, Section 7, Reid and Block 1, Section 52 and Blocks 1, 4, 7 Section 57, Braddon to investigate the potential areas of concern with respect to the possible USTs. Additionally, the Phase 2 ESA should include the assessment of Block 7, Section 57, Braddon for potential asbestos contamination within the shallow soils.

5 LIMITATIONS

A search of the Dangerous Goods records from ACT Work Cover has been requested; however the client wishes the draft report to be issued prior to the Work Cover report being received.

The findings contained within this report are the result of site observations, physical records and discussions with personnel with knowledge of the site. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the subject site. Under no circumstances, however, do these findings represent the actual state of the site at all points.

Your attention is drawn to the enclosed sheet entitled "*Important Information About Your Coffey Environmental Report*", which should be read in conjunction with this report.

6 REFERENCES

Bureau of Mineral Resources (1980) 1:50,000 Geology Map of Canberra, Queanbeyan and Environs.

Bureau of Mineral Resources (1984) 1:100,000 Hydrogeology Map of the ACT and Environs.

Department of Lands (2003) 1:25,000 Hall Topographic and Orthophoto Map 8727-4.

National Environment Protection Council (1999) National Environment Protection (Assessment of Site Contamination) Measure 1999 (*NEPM*).

NSW EPA (1997) Contaminated Land Management Act.

NSW EPA (1997) Guidelines for Consultants Reporting on Contaminated Sites.

NSW EPA (1997) Protection of the Environment Operations Act.

Important information about your **Coffey** Environmental Report

Uncertainties as to what lies below the ground on potentially contaminated sites can lead to remediation costs blow outs, reduction in the value of the land and to delays in the redevelopment of land. These uncertainties are an inherent part of dealing with land contamination. The following notes have been prepared by Coffey to help you interpret and understand the limitations of your report.

Your report has been written for a specific purpose

Your report has been developed on the basis of a specific purpose as understood by Coffey and applies only to the site or area investigated. For example, the purpose of your report may be:

- To assess the environmental effects of an on-going operation.
- To provide due diligence on behalf of a property vendor.
- To provide due diligence on behalf of a property purchaser.
- To provide information related to redevelopment of the site due to a proposed change in use, for example, industrial use to a residential use.
- To assess the existing baseline environmental, and sometimes geological and hydrological conditions or constraints of a site prior to an activity which may alter the sites environmental, geological or hydrological condition.

For each purpose, a specific approach to the assessment of potential soil and groundwater contamination is required. In most cases, a key objective is to identify, and if possible, quantify risks that both recognised and unrecognised contamination pose to the proposed activity. Such risks may be both financial (for example, clean up costs or limitations to the site use) and physical (for example, potential health risks to users of the site or the general public).

Scope of Investigations

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within practical time and budgetary constraints, and in reliance on certain data and information made available to Coffey. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Subsurface conditions can change

Subsurface conditions are created by natural processes and the activity of man and may change with time. For example, groundwater levels can vary with time, fill may be placed on a site and pollutants may migrate with time. Because a report is based on conditions which existed at the time of the subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. Consult Coffey to be advised how time may have impacted on the project and/or on the property.

Interpretation of factual data

Environmental site assessments identify actual subsurface conditions only at those points where samples are taken and when they are taken. Data derived from indirect field measurements and sometimes other reports on the site are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact with respect to the report purpose and recommended actions. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, parties involved with land acquisition, management and/or redevelopment should retain the services of Coffey through the development and use of the site to identify variances, conduct additional tests if required, and recommend solutions to unexpected conditions or other problems encountered on site.

Important information about your **Coffey** Environmental Report

Your report will only give preliminary recommendations

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore your report recommendations can only be regarded as preliminary. Only Coffey, who prepared the report, is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered with redevelopment or on-going use of the site. If another party undertakes the implementation of the recommendations of this report there is a risk that the report will be misinterpreted and Coffey cannot be held responsible for such misinterpretation.

Your report is prepared for specific purposes and persons

To avoid misuse of the information contained in your report it is recommended that you confer with Coffey before passing your report on to another party who may not be familiar with the background and the purpose of the report. In particular, a due diligence report for a property vendor may not be suitable for satisfying the needs of a purchaser. Your report should not be applied for any purpose other than that originally specified at the time the report was issued.

Interpretation by other professionals

Costly problems can occur when other professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, retain Coffey to work with other professionals who are affected by the report. Have Coffey explain the report implications to professionals affected by them and then review plans and specifications produced to see how they have incorporated the report findings.

Data should not be separated from the report

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way. Logs, figures, laboratory data, drawings, etc. are customarily included in our reports and are developed by scientists, engineers or geologists based on their interpretation of field logs (assembled by field personnel), field testing and laboratory evaluation of field samples. This information should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

Contact Coffey for additional assistance

Coffey is familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to land development and land use. It is common that not all approaches will be necessarily dealt with in your environmental site assessment report due to concepts proposed at that time. As a project progresses through planning and design toward construction and/or maintenance, speak with Coffey to develop alternative approaches to problems that may be of genuine benefit both in time and cost.

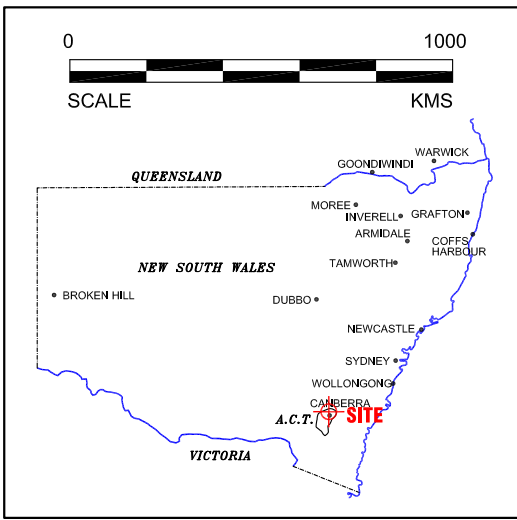
Responsibility

Environmental reporting relies on interpretation of factual information based on judgement and opinion and has a level of uncertainty attached to it, which is far less exact than other design disciplines. This has often resulted in claims being lodged against consultants, which are unfounded. To help prevent this problem, a number of clauses have been developed for use in contracts, reports and other documents. Responsibility clauses do not transfer appropriate liabilities from Coffey to other parties but are included to identify where Coffey's responsibilities begin and end. Their use is intended to help all parties involved to recognise their individual responsibilities. Read all documents from Coffey closely and do not hesitate to ask any questions you may have.

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Figures

**Phase 1 ESA
Blocks 1, 3, 4, 7, Section 57, Block 1 Section 52, Braddon and Block 1, Section
7, Reid, ACT**



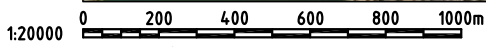
GENERAL AREA MAP




IMAGE SOURCE: street-directory.com.au, accessed 09/06/2010

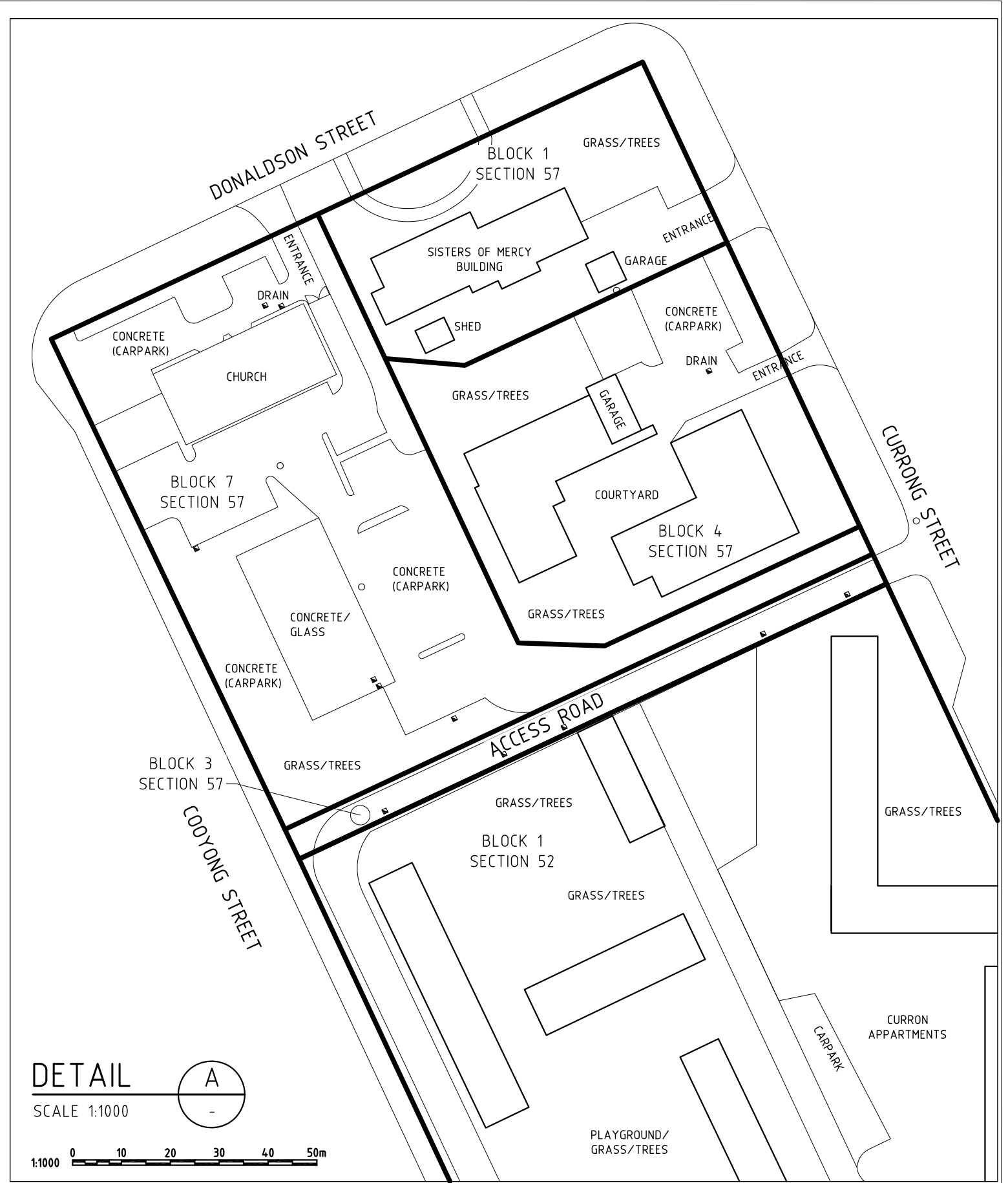
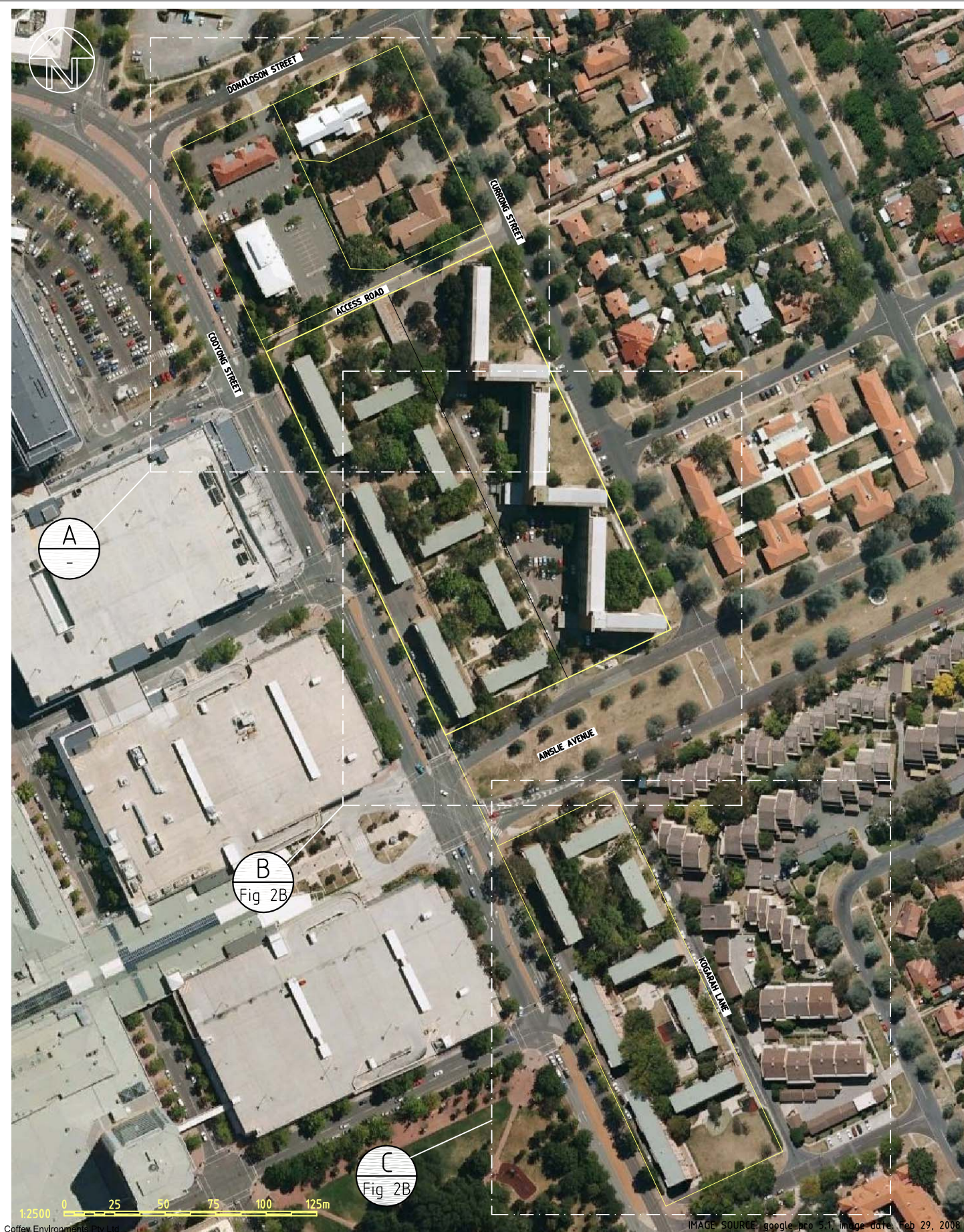


IMAGE SOURCE: google pro 5.1, image date: Feb 29, 2008



Coffey Environments Pty Ltd ©

drawn	CGT	 coffey environments SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE	client:	PURDON ASSOCIATES		
approved			project:	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT BLOCK 1, SECTION 7, REID, BLOCK 1, SECTION 52 & BLOCKS 1, 3, 4 & 7, SECTION 57, BRADDON, ACT		
date	09.06.2010		title:	SITE LOCALITY PLAN		
scale	AS SHOWN		project no:	ENVICANB00347AA-D01	figure no:	FIGURE 1
original size	A4					



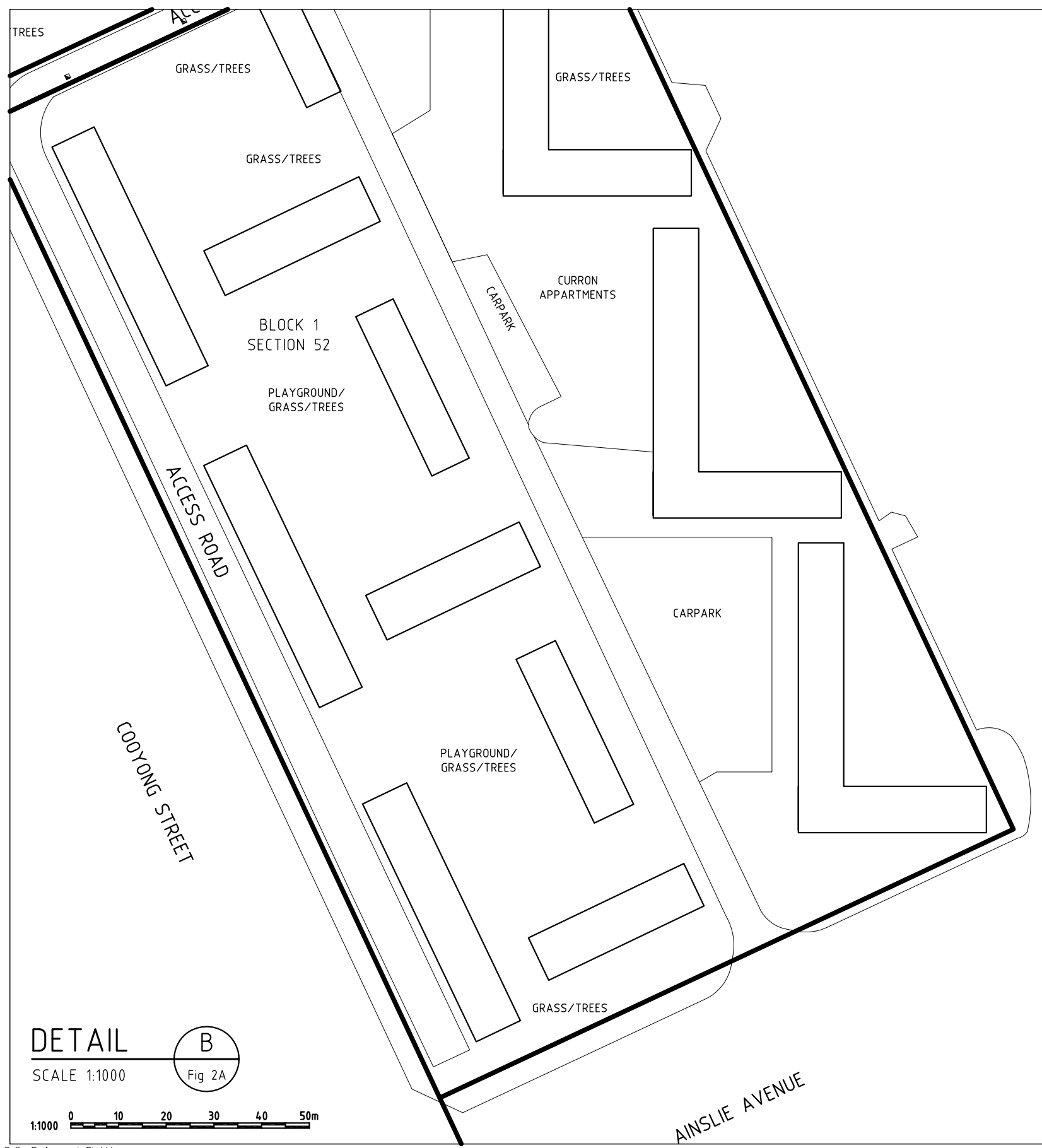
revision	description	drawn	approved	date

drawn	CGT
approved	
date	10.06.2010
scale	AS SHOWN
original size	A3

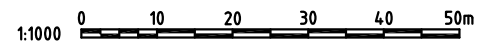
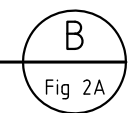
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project:	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT BLOCK 1, SECTION 7, REID, BLOCK 1, SECTION 52 & BLOCKS 1, 3, 4 & 7, SECTION 57, BRADDON, ACT
title:	SITE LAYOUT PLAN - NORTH
project no:	ENVICANB00347AA-D01
figure no:	FIGURE 2A



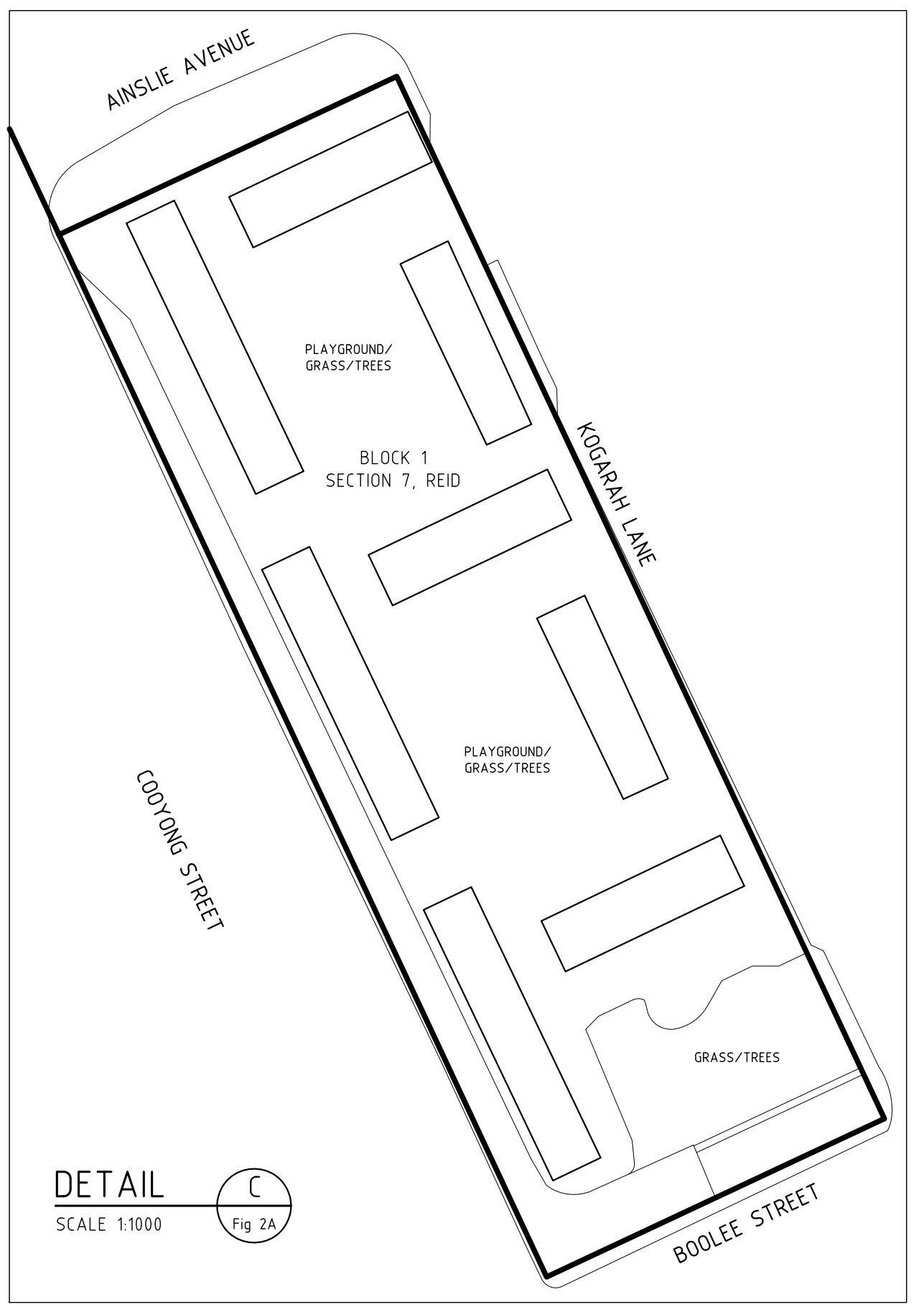
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project:	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT BLOCK 1, SECTION 7, REID, BLOCK 1, SECTION 52 & BLOCKS 1, 3, 4 & 7, SECTION 57, BRADDON, ACT
title:	SITE LAYOUT PLAN - NORTH
project no:	ENVICANB00347AA-D01
figure no:	FIGURE 2A



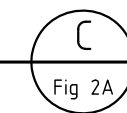
DETAIL
SCALE 1:1000



Coffey Environments Pty Ltd



DETAIL
SCALE 1:1000



revision	description	drawn	approved	date

drawn	CGT
approved	
date	10.06.2010
scale	AS SHOWN
original size	A3



client:	PURDON ASSOCIATES	
project:	PHASE 1 ENVIRONMENTAL SITE ASSESSMENT BLOCK 1, SECTION 7, REID, BLOCK 1, SECTION 52 & BLOCKS 1, 3, 4 & 7, SECTION 57, BRADDON, ACT	
title:	SITE LAYOUT PLAN - SOUTH	
project no:	ENVICANB00347AA-D01	figure no: FIGURE 2B

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Appendix A Site Photographs

**Phase 1 ESA
Blocks 1, 3, 4, 7, Section 57, Block 1 Section 52, Braddon and Block 1, Section
7, Reid, ACT**

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Appendix B Aerial Photographs

**Phase 1 ESA
Blocks 1, 3, 4, 7, Section 57, Block 1 Section 52, Braddon and Block 1, Section
7, Reid, ACT**

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Appendix C Government Correspondence

**Phase 1 ESA
Blocks 1, 3, 4, 7, Section 57, Block 1 Section 52, Braddon and Block 1, Section
7, Reid, ACT**