SUBURBAN LAND AGENCY
FIRST GRANT CONTRACT – LAND READY
SCHEDULE

DATE OF THIS CONTRACT		**2025**		
LAND		Block	Section	Division/District
		23	**10**	**Coombs**
STAGE		As described in the Housing Development Guide.		
OCCUPANCY		Vacant Possession		
CO-OWNERSHIP	Mark one *See clause 13*	☐ Tenants in common (*Show shares*)		☐ Joint Tenants
CROWN LEASE ELECTION		☒ Standard Lease		
SELLER	Full name ABN Address	**Suburban Land Agency** 27 105 505 367 480 Northbourne Avenue, Dickson ACT 2602		
SELLER'S SOLICITOR	Firm	Griffin Legal		
	Ref	Nicole Platt / Rebecca Ellem		
	Phone	02 6198 3100		
	Fax	N/A		
	Address	GPO Box 1789, CANBERRA CITY ACT 2601		
	Email	sla.property@griffinlegal.com.au		
BUYER	Full Name ACN Address			
BUYER'S SOLICITOR	Firm			
	Ref			
	Phone			
	Fax			
	DX/Address			
	Email			
RESIDENTIAL WITHHOLDING TAX		New Residential Premises?	☒ No	☐ Yes
		Potential Residential Land?	☐ No	☒ Yes
		RW Amount required to be paid?	☐ No	☒ Yes
PRICE	Price Less Deposit Balance	**$** **$** **$**	(The Price is GST inclusive) (5% of Price) – see clause 2	
DATE FOR COMPLETION		On or before 42 days after the Date of this Contract		
STANDARD ANNEXURES	*Documents annexed to this Contract*	Annexure A – Background Documents; Annexure B – Specimen Crown Lease; Annexure C – Deposited Plan; Annexure D – Site Classification Certificate; Annexure E – Clearance Certificate		
SPECIAL CONDITIONS	*Indicate if special conditions apply*	☐ Yes	☒ No	

READ THIS BEFORE SIGNING

Before signing this contract you should ensure that you understand your rights and obligations. You should get advice from your solicitor.

Authorised Delegate of the Suburban Land Agency signature:		Buyer signature:	
Delegate name:		Buyer name:	
Witness signature:		Buyer signature:	
Witness name:		Buyer name:	
		Witness Signature:	
		Witness Name:	
		Signed by the Buyer pursuant to section 127 of the *Corporations Act 2001* (Cth):	

Director signature:	
Director name:	
Director/ Secretary signature:	
Director/ Secretary name:	

RW AMOUNT

(Residential Withholding Payment) – Further Details

The supplier will frequently be the Seller. However, sometimes further information will be required as to which entity is liable for GST (eg if the Buyer is part of a GST group where the GST representative has the GST liability). If more than one supplier, provide details for each supplier.

Supplier	Name	Suburban Land Agency		
	ABN	27 105 505 367	Phone	(02) 6205 0600
	Business address	480 Northbourne Avenue, Dickson ACT 2602		
	Email	suburbanlandaccounts@act.gov.au		
Residential Withholding Tax	Supplier's portion of the RW Amount:			100%
	RW Percentage:			7%
	RW Amount (ie the amount that the Buyer is required to pay to the ATO):			An amount equivalent to 7% of the Price
	Is any of the consideration not expressed as an amount in money?			☐ Yes ☒ No
	If 'Yes', the GST inclusive market value of the non-monetary consideration:			Not Applicable
	Other details (including those required by regulation or the ATO forms): Not Applicable			

1. GRANT OF THE LEASE

1.1 The Seller, as delegate of the Territory Planning Authority and on behalf of the Commonwealth of Australia will grant, or will procure the grant of, the Lease to the Buyer on Completion.

1.2 The Lease will be granted substantially upon the same terms and conditions as set out in the Specimen Crown Lease.

2. TERMS OF PAYMENT

2.1 The Buyer must pay the Deposit to the Seller on the Date of this Contract.

2.2 The Deposit may be paid by cheque, EFTPOS or EFT.

2.3 The Deposit is released to the Seller (when paid) and becomes the Seller's property absolutely (being part payment of the Price).

2.4 If the Deposit is:

(a) not paid on time in accordance with clause 2.2; or

(b) paid by cheque, which is not honoured on first presentation.

the Buyer is in default of an essential term and the Seller may terminate this Contract immediately by giving written notice to the Buyer, without the notice otherwise necessary under clause 24, and clause 25 will apply.

2.5 Any money payable to the Seller by the Buyer must be paid to the Seller or as the Seller's Solicitor directs in writing.

2.6 If this Contract is:

(a) rescinded; or

(b) terminated due to the default of the Seller,

and the Buyer is entitled to a refund of the Deposit, then the Seller will account to the Buyer for the Deposit, or part thereof, paid by the Buyer under this Contract.

2.7 The Seller is not liable to pay interest on the Deposit, or part thereof, if refunded to the Buyer pursuant to clause 2.6, provided that the Deposit is refunded to the Buyer within 15 Working Days of the date this Contract is rescinded or terminated by the Buyer due to the Seller's default.

2.8 The payment of the Deposit by the Buyer to the Seller does not create a charge over the Land to the value of the Deposit or any other amount.

2.9 On Completion the Buyer must pay to the Seller the Balance of the Price, together with any other money payable under this Contract, by unendorsed bank cheque.

3. DATE FOR COMPLETION

3.1 Completion must take place in Canberra on the Date for Completion or as otherwise determined by the Contract and if not specified or determined, within a reasonable time.

3.2 The Buyer may seek an extension to the Date for Completion by submitting a request in writing to the Seller's Solicitor (the **Extension Request**), which must:

(a) state the period by which the Buyer seeks to extend the Date for Completion;

(b) state the reason for the Extension Request; and

(c) be accompanied by a cheque for the sum of $440 (inclusive of GST) in favour of the Seller, to be applied against the legal costs and disbursements incurred by the Seller in considering the Extension Request (the **Extension Fee**).

3.3 Upon receipt of the Extension Request, the Seller will either, at the Seller's absolute and unfettered discretion, accept or refuse the Extension Request.

3.4 The Buyer acknowledges and agrees the Extension Fee is payable to the Seller irrespective of whether the Seller accepts or refuses the Extension Request.

4. SIGNING OF LEASE

4.1 The Buyer must, no later than 10 working days from the date the Seller serves the Lease on the Buyer:

(a) sign the Lease; and

(b) return to the Seller's Solicitor the signed original Lease.

4.2 The Buyer undertakes to register the Lease following Completion.

5. HOUSING DEVELOPMENT GUIDE

5.1 The Housing Development Guide is annexed to this Contract by way of disclosure only.

5.2 If there is any variation to the Housing Development Guide prior to Completion, the Seller may notify the Buyer and provide:

(a) a copy of the final form of the amended document; or

(b) the variations,

to the Buyer prior to Completion.

5.3 The Buyer acknowledges that the Land is ready and available for inspection.

5.4 The Buyer enters into this Contract in reliance upon the Deposited Plan annexed to this Contract and on the Buyer's own enquiries.

5.5 If there is an inconsistency between the Housing Development Guide and the Deposited Plan, the Deposited Plan prevails.

5.6 The Buyer cannot make a claim or objection or rescind or terminate or make a claim for compensation under clause 23 of this Contract in respect of any matter set out in the Housing Development Guide.

6. VARIATIONS

6.1 The Buyer acknowledges that the Specimen Crown Lease, Housing Development Guide, Block Details Plan and any other plans relating to the Land may be affected by one or more of the following:

(a) the requirements of legislation;

(b) variations to the Territory Plan; or

(c) the requirements of any Authority;

and may result in one or more of the following:

(d) minor redefinition of the boundaries of the Land;

(e) minor road re-alignment or dedication; or

(f) minor variations of the easements relating to the provision of electricity, water, sewerage and stormwater services.

6.2 Any redefinition, road realignment or dedication or variation of easements will be deemed to be minor if it does not materially and detrimentally affect the use of the Land.

6.3 The Buyer cannot make a claim (including a claim for compensation under clause 23), objection or requisition or rescind or terminate this Contract in respect of any matter contemplated in clause 6.1.

7. PLANNING CONDITIONS

7.1 The Buyer acknowledges that the Territory Planning Authority, and not the Seller, is responsible for the Territory Plan and all development consents and approvals sought by or on behalf of the Buyer in relation to the Land and the Buyer releases the Seller from any and all liability, cause of action or any other claim in relation to disturbance, loss or detriment caused by the Territory Planning Authority granting, delaying or denying any consent or approval in relation to the Land.

7.2 The Buyer acknowledges it is the Buyer's obligation to make enquiries and to satisfy itself as to the currency and accuracy of the information and requirements of the Planning Act and the Territory Plan in relation to any proposed Development of the Land.

7.3 The Buyer acknowledges that nothing in this Contract or the fact of Completion implies or means that any required approvals, consents or licences regarding planning, design, siting or any other matters relating to the Buyer's Development of the Land will be granted by the Territory Planning Authority or any other relevant Authority or if granted, with or without conditions.

8. PROPERTY ACT

8.1 The Property Act does not apply to this Contract as this Contract is not a sale of Residential Property and the grant of the Lease will be the first grant of a Crown lease over the Land.

9. NON-CONFORMING TRANSFERS NOT TO BE USED

9.1 The Buyer is not permitted to use a transfer not made in conformity (as described under section 17(3) of the *Duties Act 1999* (ACT)) with this Contract, as the grant of the Lease will be the first grant of a Crown Lease over the Land.

10. STAMP DUTY

10.1 The Buyer must pay all stamp duty in respect of any transfer of the land.

11. ENTIRE AGREEMENT

11.1 Subject to clause 12.2, except where expressly stated in this Contract, the Buyer agrees that this Contract sets out the entire agreement of the Parties on the subject matter of this Contract and supersedes any prior agreement, advice, material supplied to the Buyer or understanding on anything connected with the subject matter of this Contract.

11.2 Clause 12.1 does not limit rights the Buyer may have at law regarding false or misleading representations by the Seller or material omissions regarding matters in the Seller's knowledge prior to entering into this Contract.

12. NO RELIANCE

12.1 Each Party has entered into this Contract without reliance upon any representation, statement or warranty (including sales and marketing material and preliminary artwork) except as set out in this Contract.

13. CO-OWNERSHIP

13.1 Where the Buyer consists of more than one person, as between themselves, they agree to buy the Land in the specified manner of Co-ownership stated in the Schedule or if Co-ownership is not marked, as joint tenants.

14. NON-MERGER

14.1 If any term of this Contract may be given effect after Completion that term will not merge on Completion but will continue in force for as long as is necessary to give effect to it.

15. BUYER RELIES ON OWN ENQUIRIES

15.1 The Buyer acknowledges that it relies on its own enquiries in relation to the Lease and the Land and warrants that in entering into this Contract the Buyer:

(a) has not relied on any express or implied statement, warranty or representation whether oral, written or otherwise made by or on behalf of the Seller to the Buyer in connection with the Lease or the Land;

(b) has not relied on any documentation made available by or on behalf of the Seller to the Buyer in relation to the Lease or the Land, other than documentation forming part of this Contract; and

(c) is satisfied as to the nature, quality and condition of the Land and the purposes for which the Land may be used, including but not limited to any Development of the Land.

15.2 The Seller makes no warranty as to the accuracy or completeness of any document made available by or on behalf of the Seller to the Buyer in connection with the Lease or the Land, or any document annexed to this Contract.

15.3 For the avoidance of doubt, the Seller will not be liable to the Buyer for any damage or loss caused to the Land, or the existence of any building waste on the Land, on or following the date of Completion, except where caused by the negligent or deliberate action or omission of the Seller, its employees, agents or contractors.

15.4 Nothing in this clause limits the rights the Buyer may have at law regarding false or misleading representations by the Seller or material omissions regarding matters in the Seller's knowledge prior to entering into this Contract.

16. PRIVACY

16.1 The Buyer acknowledges that they have received, read, and understood the SLA Privacy Policy and accepts that any information collected by the Seller pursuant to this Contract, or previously in relation to this Contract, is held and used in accordance with the SLA Privacy Policy.

16.2 The Buyer consents to the Seller's use of any personal information provided by the Buyer to reasonably fulfil the purpose of this Contract and any of its functions, including but not limited to disclosure of personal information to the ACT Revenue Office and other relevant Authorities.

17. BUYER RIGHTS AND LIMITATIONS

17.1 The Buyer is not entitled to make any requisitions on the title to the Land.

17.2 Subject to clause 18.4, the Buyer cannot make a claim (including a claim for compensation under clause 23), objection or requisition or rescind or terminate this Contract in respect of:

(a) a Utility Service for the Land being a joint service or passing through another property, or any Utility Service for another property passing through the Land;

(b) a promise, representation or statement about this Contract, the Land or the Lease, not made in this Contract;

(c) the size of any service ties for the supply of water on or to the Land;

(d) any matter contained in the Block Fill Plans or the existence of regrading, fill, contamination of any Substance or other disability of or upon the Land, whether caused by an Authority, the Seller, previous occupant of the Land or otherwise;

(e) any soil classification in relation to the Land; and

(f) anything disclosed in this Contract (except an Affecting Interest).

17.3 Nothing in this clause limits the rights the Buyer may have at law regarding false or misleading representations by the Seller or material omissions regarding matters in the Seller's knowledge prior to entering into this Contract.

17.4 The Buyer acknowledges, understands and accepts that the existence of regrading, fill, contamination, Substance or other disability of or upon the Land may result in work for the construction of any building on the Land being more extensive and expensive than it may otherwise have been in the absence of such regrading, fill, contamination, Substance or other disability.

17.5 The Buyer acknowledges that the Seller makes no warranty or representation as to the environmental condition or state of the soil, ground water, contamination or the existence or non-existence of any Substance on or affecting the Land.

18. SELLER WARRANTIES

18.1 The Seller warrants that at the Date of this Contract the Seller:

(a) will be able to complete at Completion;

(b) has no knowledge of any unsatisfied judgment, order or writ issued by a court or tribunal affecting the Land;

(c) has no knowledge of any current or threatened claims, notices or proceedings that may lead to a judgment, order or writ issued by a court or tribunal affecting the Land; and

(d) is not aware of any material change in the matters disclosed in the Housing Development Guide.

18.2 The Seller warrants that on Completion:

(a) the Seller will have the capacity to complete;

(b) there will be no unsatisfied judgment, order or writ issued by a court or tribunal affecting the Land;

(c) the Seller has no knowledge of any current or threatened claims, notices or proceedings that may lead to a judgment, order or writ issued by a court or tribunal affecting the Land; and

(d) the Seller is not aware of any encroachments by or upon the Land except as disclosed. This warranty does not extend to the location of any dividing fence.

18.3 The Seller gives no warranties as to the present state of repair of the Improvements or condition of the Land, except as required by law.

19. ADJUSTMENTS

19.1 As the Lease will be granted on Completion, there will be no adjustments of Income or Land Charges between the Parties on Completion.

20. TERMS OF POSSESSION

20.1 The Seller must give the Buyer vacant possession of the Land on Completion unless otherwise marked in the Schedule.

21. INSPECTION OF LAND

21.1 The Buyer may on reasonable notice to the Seller inspect the Land during the period that is 10 Working Days prior to the Date for Completion.

22. ERRORS AND MISDESCRIPTIONS AND MATERIALLY DETRIMENTAL VARIATIONS

22.1 The Buyer will be entitled to make a claim for compensation prior to Completion if the Buyer suffers a material loss as a result of:

(a) an error of any kind or misdescription of the Land in this Contract and the error has not been or cannot be rectified by the Seller by Completion; or

(b) changes to the boundaries of the Land or dedications and variations of easement relating to the provision of electricity, gas, water, sewerage and stormwater services made after the Date of this Contract and prior to Completion, only where the change, dedication or variation materially and detrimentally affects use of the Land and which the Buyer could not have discovered prior to the Date of this Contract.

22.2 This clause 23 applies even if the Buyer did not take notice of or rely on anything in this Contract containing or giving rise to the error or misdescription of the Land.

22.3 The Buyer is not entitled to compensation to the extent the Buyer knew the true position before the Date of this Contract.

22.4 For the avoidance of doubt and without limitation, clause 23.1(a) applies to misdescriptions or errors in the Contract arising from material differences between express pre-contractual representations or material omissions made by the Seller (that were not withdrawn or corrected prior to the Date of this Contract) and the terms of this Contract.

23. COMPENSATION CLAIMS BY BUYER

23.1 To make a claim for compensation (including a claim under clause 23) the Buyer must give notice to the Seller before Completion specifying the amount claimed and:

(a) the Seller can rescind if in the case of a claim that is not a claim for delay:

(i) the total amount claimed exceeds 5% of the Price;

(ii) the Seller gives notice to the Buyer of an intention to rescind; and

(iii) the Buyer does not give notice to the Seller waiving the claim within 10 Working Days after receiving the notice;

(b) if the Seller does not rescind under clause 24.1(a) the Parties must complete and:

(i) the claim must be finalised (subject to clause 24.1(b)(ii)) either by agreement or, failing agreement, by an arbitrator appointed by the Parties or, if an appointment is not made within 20 Working Days of Completion, by an arbitrator appointed by the President of the Law Society of the Australian Capital Territory at the request of a Party;

(ii) the decision of the arbitrator is final, and binding save for:

A. manifest error by the arbitrator obvious on its face in the final determination by the arbitrator;

B. error in the application of law by the arbitrator in making his or her determination; or

C. improper or unlawful conduct by the arbitrator or either Party that affected or might reasonably be thought to affect the arbitrator's determination;

(iii) the costs of the arbitration must be shared equally by the Parties unless otherwise determined by the arbitrator;

(iv) the Buyer is not entitled, in respect of the claim, to more than the total amount claimed and the costs of the Buyer; and

(v) the claim lapses if the Parties do not appoint an arbitrator and neither Party asks the President of the Law Society of the Australian Capital Territory to appoint an arbitrator within 90 calendar days after Completion.

24. NOTICE TO COMPLETE AND DEFAULT NOTICE

24.1 If Completion does not take place by the Date for Completion, either Party may, at any time after the Date for Completion, serve on the other Party a Notice to Complete.

24.2 A Notice to Complete must appoint a time during business hours and a date being not less than 14 working days after service of the Notice to Complete (excluding the date of service) by which, and a place in Canberra at which, to complete this Contract.

24.3 At the time the Notice to Complete is served the Party serving the Notice to Complete must:

(a) not be in default; and

(b) be ready, willing and able to complete but for some default or omission of the other Party.

24.4 Completion at the time, date and place specified in the Notice to Complete is an essential term.

24.5 Where one Party is in default (other than failing to complete) the other Party may at any time after the default serve the Party in default a Default Notice.

24.6 A Default Notice must:

(a) specify the default; and

(b) require the Party served with the Default Notice to rectify the default within 14 working days after service of the Default Notice (excluding the date of service).

24.7 At the time the Default Notice is served, the Party serving the Default Notice must not be in default.

24.8 The time specified in a Default Notice to rectify the specified default is an essential term.

24.9 Clauses 26 and 27 will apply as applicable where the Party served does not comply with the Notice to Complete or the Default Notice issued in accordance with this clause.

24.10 If the Party serving a notice under this clause varies the time referred to in the notice at the request of the other Party:

(a) the time agreed to in the variation remains an essential term; and

(b) the consent to the variation must be in writing and be served on the other Party.

24.11 The Parties agree that the time referred to in clauses 25.2 and 25.6(b) is fair and reasonable.

25. TERMINATION – BUYER'S DEFAULT

25.1 If:

(a) the Seller serves a notice on the Buyer in accordance with clause 2.4;

(b) the Buyer is in default under clause **Error! Reference source not found.**;

(c) the Buyer does not comply with a Notice to Complete or a Default Notice; or

(d) the Buyer is otherwise in breach of an essential term,

then the Seller may by written notice served on the Buyer terminate this Contract and may then keep, or recover and keep, the Deposit (except so much of it as exceeds 5% of the Price) and either:

(e) sue the Buyer for breach; or

(f) re-sell the Land and any deficiency arising on the resale and all expenses of and incidental to the resale or attempted resale of the Land and the Buyer's default are recoverable by the Seller from the Buyer as liquidated damages provided the Seller has entered into a contract for the resale of the Land within 12 months of termination of this Contract.

25.2 In addition to any money kept or recovered under clause 26.1, the Seller may retain on termination any other money paid by the Buyer as security for any damages awarded to the Seller arising from the Buyer's default provided that proceedings for the recovery of damages are commenced within 12 months of termination of this Contract.

26. TERMINATION – SELLER'S DEFAULT

26.1 If the Seller does not comply with a Notice to Complete or a Default Notice or is otherwise in breach of an essential term the Buyer may by notice served on the Seller either:

(a) terminate and seek damages; or

(b) enforce without further notice any other rights and remedies available to the Buyer.

27. RESCISSION

27.1 If this Contract is rescinded, it is rescinded from the beginning, and unless the Parties otherwise agree:

(a) the Deposit and all other money paid by the Buyer must be refunded to the Buyer immediately without any further authority being necessary; and

(b) neither Party is liable to pay the other any amount for damages, costs or expenses.

28. DAMAGES FOR DELAY IN COMPLETION

28.1 If Completion does not occur by the Date for Completion, due to the default of either Party, the Party who is at fault must pay the other Party as liquidated damages on Completion:

(a) interest on the Price at the rate of 10% per annum calculated on a daily basis on and from the date that is 7 calendar days after the Date for Completion to the date of Completion (inclusive); and

(b) the amount of $660.00 (including GST) to be applied towards any legal costs and disbursements incurred by the Party not at default if Completion occurs on or later than 7 calendar days after the Date for Completion.

28.2 The Party at fault must pay the amount specified in clause 29.1 in addition to any other damages to which the Party not at fault is entitled both at law and under this Contract.

28.3 The Parties agree that:

(a) the amount of any damages payable under clause 29.1(a) to the Party not in default is a genuine and honest pre-estimate of loss to that Party for the delay in Completion; and

(b) the damages must be paid on Completion.

29. FOREIGN BUYER

29.1 The Buyer warrants the Commonwealth Treasurer cannot prohibit and has not prohibited the grant of the Lease under the *Foreign Acquisitions and Takeovers Act 1975* (Cth).

29.2 This clause is an essential term of this Contract.

30. GST

30.1 The Buyer and the Seller agree that:

(a) the Margin Scheme applies to the supply of the Land to the Buyer under this Contract; and

(b) the Price is inclusive of any GST payable under the Margin Scheme.

30.2 The Seller warrants that it can use the Margin Scheme and promises that it will.

31. INSOLVENCY

31.1 If the Buyer suffers an Insolvency Event, the Buyer must immediately notify the Seller in writing.

31.2 If the Seller receives notice that the Buyer has suffered an Insolvency Event (either pursuant to clause 32.1 or by some other means), the Seller may terminate this Contract without notice otherwise being required under clause 25, and clause 26 will apply.

32. POWER OF ATTORNEY

32.1 Any Party who signs this Contract or any document in connection with it under a power of attorney must, on request and without cost, provide the other Party with a true copy of the registered power of attorney.

33. NOTICES CLAIMS AND AUTHORITIES

33.1 Notices, claims and authorities required or authorised by this Contract must be in writing.

33.2 To serve a notice a Party must:

(a) leave it at; or

(b) send it by a method of post requiring acknowledgement of receipt by the addressee to,

the address of the person to be served as stated in the Schedule or as notified by that person to the other as that person's address for service under this Contract, or:

(c) serve it on that Party's solicitor in any of the above ways; or

(d) send it by email to an email address of that Party's solicitor specified on the Schedule, or otherwise as notified from time to time.

33.3 A Party's solicitor may give a notice, claim or authority on behalf of that Party.

33.4 If a notice is served in accordance with clause 34.2(a), the notice is taken to have been received on the day that it is delivered or, if not delivered before 5:00pm on a Working Day, on the next Working Day.

33.5 If a notice is served in accordance with clause 34.2(b), the notice is taken to have been received on the day that is 3 Working Days after it was posted.

33.6 If a notice is served in accordance with clause 34.2(d), unless the receiving Party indicates by immediate automatic response that the email address is unattended, the notice is taken to have been received at the time it was sent and if not sent before 5:00pm on a Working Day, on the next Working Day.

34. BUSHFIRE PROTECTION

34.1 The Buyer acknowledges that the Land may be affected by legislation and regulations in connection with bushfire protection and that those requirements are subject to change.

35. CAT CONTAINMENT

35.1 The Buyer acknowledges that the Land will become part of an area which is declared to be a cat curfew area under the *Domestic Animals Act 2000* (ACT) and cats located within areas

declared to be cat curfew areas must be confined to their keeper's or carer's premises at all times.

36. GEOTECHNICAL INFORMATION

36.1 The Site Classification Certificate with respect to this Land has been disclosed in this Contract.

36.2 If there is any variation to the Site Classification Certificate prior to Completion, the Seller may notify the Buyer and provide:

(a) a copy of the final form of the amended document; or

(b) the variations,

to the Buyer prior to Completion.

36.3 The Buyer may not make any claim, objection or requisition or rescind or terminate this Contract in respect of any matter set out, or referred to, in the Site Classification Certificate.

37. NOT USED

38. SERVICE PROVIDERS

38.1 The Buyer acknowledges that the Seller is not a Utility Service provider and any works undertaken on the Land by the Seller do not include actual connections to services, substations or transformers that may be required for a Utility Service.

38.2 The Buyer acknowledges:

(a) that the Buyer is responsible for contacting all relevant service providers for Utility Services to arrange for servicing of the Land and a failure to do so may cause delays to the Buyer's Development due to there being no access to water or power; and

(b) the Seller has not and does not provide any representation or warranty relating to the existence, or future installation or location, of any future substations, and

(c) the Buyer may not make any claim, objection or requisition or rescind or terminate this Contract, and releases the Seller in respect of any claim or cause of action, relating to any matter set out, or referred to, in this clause.

39. RESIDENTIAL WITHHOLDING TAX

Warning: The following clauses 40.1 to 40.15 are subject to the Withholding Law, and do not encompass all obligations under the Withholding Law.

39.1 In this clause 40 the following words have the following meanings:

ATO means the Australian Taxation Office, and includes the Commissioner for Taxation;

RW Amount means the amount which must be paid under section 14-250 of the Withholding Law;

RW Amount Information means the information set out in the table entitled "RW Amount (Residential Withholding Payment) — Further Details" set out in this Contract, and as provided or updated under this Contract;

RW Percentage means the percentage amount stated in section 14-250(6), (8) and (9) of the Withholding Law, as applicable to the supply of the Land from the Seller to the Buyer; and

Withholding Law means Subdivision 14 of Schedule 1 of the *Taxation Administration Act 1953* (Cth) and associated provisions.

39.2 The Seller must provide the Buyer with the RW Amount Information no later than 28 calendar days prior to the Date for Completion.

39.3 If the 'RW Amount required to be paid?' option on the Schedule is selected 'no' or if no selection is made, the Seller warrants to the Buyer that the Buyer is not required to make a payment under section 14-250 in relation to the supply of the Land from the Seller to the Buyer.

39.4 The following clauses 40.5 to 40.15 inclusive only apply if the 'RW Amount required to be paid ?' option on the Schedule is selected 'yes'.

39.5 Subject to any adjustments to the Price or non-monetary consideration that may arise after the date that the RW Amount Information is provided in accordance with clause 40.2 and which affect the RW Amount, the Seller warrants to the Buyer on the date that the RW Amount Information is provided to the Buyer that the Seller has provided the Buyer with the information required under section 14-255 of the Withholding Law in relation to the supply of the Land from the Seller to the Buyer, and that this information is true and correct to the Seller's knowledge.

39.6 The Buyer must provide the Seller with a copy of the 'GST property settlement withholding notification online form' confirmation email (or emails, if applicable) issued to the Buyer by the ATO at least 10 Working Days prior to the Date for Completion.

39.7 The Buyer must provide the Seller with evidence of submission by the Buyer to the ATO of the 'GST property settlement date confirmation online form', with such evidence to be provided prior to or on Completion.

39.8 The Seller irrevocably instructs the Buyer to draw as part of the Price, and the Buyer must draw and give to the Seller on Completion, an unendorsed bank cheque payable to the ATO for the RW Amount.

39.9 The Seller must forward the unendorsed bank cheque provided under clause 40.8 to the ATO within 5 Working Days following Completion and provide the Buyer with evidence of payment of the RW Amount to the ATO.

39.10 The Buyer and Seller must comply with all ATO requirements in relation to the Withholding Law and must also assist and co-operate with each other in order to ensure that those requirements are met. If necessary to give effect to this clause, the Buyer appoints the Seller as its agent for the purpose of completing any notification required to be given by the Buyer to the ATO.

39.11 The Seller may provide the Buyer with updated RW Amount Information at any time, and (if necessary) on more than one occasion, prior to Completion.

39.12 If the Seller provides the Buyer with updated RW Amount Information in accordance with this clause, the Buyer must, within 3 Working Days of receipt of the RW Amount Information, provide the Seller with a copy of the 'GST property settlement withholding notification online form' confirmation email (or emails, if applicable) issued to the Buyer by the ATO including the updated RW Amount Information.

39.13 The Seller indemnifies the Buyer against the amount of any penalties or interest charges imposed by the ATO on the Buyer (or the relevant recipient of the supply) arising from any failure by the Seller to forward the unendorsed bank cheque required by clause 40.8 to the ATO.

Potential Residential Land

39.14 If the 'Potential Residential Premises?' option on the Schedule is selected 'yes' and the Buyer (or the relevant recipient for GST purposes) is:

(a) registered for GST purposes; and

(b) acquiring the Land for a creditable purpose;

the Buyer must provide the Seller with a statement to that effect on the earlier of:

(c) 10 Working Days before the Date for Completion; or

(d) 20 Working Days after the Date of this Contract.

39.15 Where the Buyer has provided the statement referred to in clause 40.14 the Buyer indemnifies the Seller and will keep the Seller indemnified against the amount of any penalties or interest charges imposed by the ATO on the Seller (or the relevant entity making the supply of the Land).

40. FOREIGN RESIDENT WITHHOLDING TAX

40.1 If the Relevant Price is less than the dollar amount stated in section 14-215(1)(a) of the Withholding Law as at the Date of this Contract, the parties acknowledge that there are no obligations under the Withholding Law.

40.2 If a Clearance Certificate for the Seller is attached to this Contract or provided to the Buyer prior to Completion, the parties acknowledge that there are no obligations under the Withholding Law.

40.3 If neither of clauses 41.1 or 41.2 apply, then:

(a) the Seller must provide to the Buyer any information required to enable the Buyer to comply with clause 41.3(b)(i), within 5 calendar days of written request from the Buyer;

(b) the Buyer must:

(i) lodge a purchaser payment notification form with the ATO; and

(ii) give evidence of compliance with clause 41.3(b)(i) to the Seller, no later than 5 calendar days before the Date for Completion;

(c) the Seller irrevocably instructs the Buyer to draw as part of the Price, and the Buyer must draw and retain on Completion, an unendorsed bank cheque payable to the ATO for the Withholding Amount; and

(d) the parties must both, on the date of Completion, attend the offices of an authorised collection agent of the ATO to deposit the bank cheque referred to in clause 41.3(c) in payment of the Withholding Amount following Completion.

40.4 If clause 41.3 applies and the parties do not comply with clause 41.3(d):

(a) the Buyer indemnifies the Seller for any loss or damage resulting from the Buyer's delay in remitting and/or failure to remit the Withholding Amount to the ATO; and

(b) the Buyer charges the Land (for the benefit of the Seller) with the Buyer's obligations under this clause 41.4.

40.5 Where the Seller gives the Buyer a Variation Certificate prior to Completion, the Withholding Amount is the amount stated in the Variation Certificate.

40.6 Where a Clearance Certificate is provided by the Seller to the Buyer, the Seller warrants to the Buyer that the Seller is the entity referred to in the Clearance Certificate and is the relevant taxpayer for capital gains tax payable on the sale of the CGT Assets sold under this Contract.

41. DEFINITIONS

41.1 Definitions appear in the Schedule and as follows:

ACT Revenue Office means the ACT Revenue Office of the Chief Minister, Treasury and Economic Development Directorate;

Affecting Interest means any mortgage, encumbrance, lease, lien, charge, notice, order, caveat, writ or other interest;

ATO means the Australian Taxation Office, and includes the Commissioner for Taxation;

Authority means any government or regulatory authority and includes:

(a) any provider of public Utility Services, whether statutory or not; and

(b) any other person, authority, instrumentality or body having jurisdiction, rights, powers, duties or responsibilities over the Land or any part of it, including any ACT or Commonwealth government agency;

Balance of the Price means the Price less the Deposit;

Block Boundary means the boundary of the Land as shown on the Block Details Plan and does not include the Verge;

Block Details Plan means the plan described as such in the Housing Development Guide;

Block Fill Plans means the plans described as such in the Housing Development Guide;

Certificate of Compliance has the meaning in the Planning Act;

Certificate of Occupancy has the meaning given to it in the *Building Act 2004* (ACT) for the dwelling erected on the Land;

CGT Asset has the meaning in the *Income Tax Assessment Act 1997* (Cth);

Clearance Certificate means a certificate issued under section 14-220 of the Withholding Law that covers the date of Completion;

Completion means the time at which this Contract is completed;

Contract means the Schedule, terms and conditions and any annexure, additional clauses and attachments forming part of this contract;

Crown Lease means a Crown lease granted in accordance with the Planning Act in a form similar to the Specimen Crown Lease;

Default Notice means a notice in accordance with clauses 25.5 and 25.6;

Deposit means the amount specified in the Schedule which is 5% of the Price and which:

(a) forms part of the Price; and

(b) must be paid by the Buyer to the Seller in accordance with clause 2 or 3, as applicable;

Deposited Plan means a plan, on which the location and boundaries of the Land are defined, and registered under section 7 of the *Districts Act 2002* (ACT);

Development has the meaning in the Planning Act;

GST has the meaning ascribed to it under the GST Law and, where appropriate, includes voluntary and Notional GST. Expressions used in this Contract of Sale which are defined in the GST Law have the same meaning as given to them in the GST Law;

GST Law means the *A New Tax System (Goods and Services Tax) Act 1999* (Cth);

Improvements means the buildings, structures and fixtures erected on and forming part of the Land as at the Date of this Contract, if any;

Income means the rents and profits derived from the Land;

Insolvency Event means the following:

(a) where the Buyer is a natural person and:

(i) the Buyer authorises a registered trustee or solicitor to call a meeting of his or her creditors and enters into a deed of assignment or deed of arrangement or a composition with any of his or her creditors;

(ii) a third party who holds a security interest in the assets of the Buyer enters into possession, or takes control of those assets, or attempts by any means to do the same; or

(iii) the Buyer commits an act of bankruptcy; or

(b) where the Buyer is a body corporate and:

(i) the Buyer becomes, or attempts are made for the Buyer to become an externally administered body corporate in accordance with the *Corporations Act 2001* (Cth); or

(ii) a controller (as defined by the *Corporations Act 2001* (Cth)) is appointed, or attempts are made to have a controller appointed for any of the Buyer's assets;

Kerb Line means the kerb line of the Land as shown on the Block Details Plan;

Land means the land described in the Schedule and to be the subject of the Lease;

Land Charges means rates, land rent, land tax and other taxes and outgoings of a periodic nature in respect of the Land;

Lease means a Crown Lease in a form similar to the Specimen Crown Lease which may, where the Land is affected by an easement identified in the Housing Development Guide, include an annexure or additional provisions detailing the terms of an easement;

Margin Scheme has the meaning ascribed to it in the GST Law;

Notice to Complete means a notice in accordance with clauses 25.1 and 25.2 requiring a Party to complete this Contract;

Notional GST means, where the supplier is the Commonwealth and an obligation exists to make voluntary or notional GST payments under section 177-1 of the GST Law, those voluntary or notional payments are made by or on behalf of the Commonwealth. For the

avoidance of doubt Notional GST amounts will be calculated as if the GST Law applies to the relevant supplies;

Party means a party to this Contract and **Parties** has the corresponding meaning;

Planning Act means the *Planning Act 2023* (ACT);

Property Act means the *Civil Law (Sale of Residential Property) Act 2003* (ACT);

Relevant Percentage means the percentage amount stated in section 14-200(3)(a) and 14-205(4)(a) of the Withholding Law;

Relevant Price means the higher of:

(a) the Price (including GST); and

(b) the market value of the CGT Assets sold under this Contract, as at the Date of this Contract;

Residential Property has the same meaning given to it in the Property Act.

Schedule means the schedule to this Contract;

SLA Privacy Policy means the privacy policy and/or statement published from time to time on the website managed by the Suburban Land Agency.

Specimen Crown Lease means the specimen Crown Lease contained in Annexure B;

Substance means any substance or thing which is or may be an emission to the environment or harmful to the environment or the health or safety of any person or may cause damage to property and includes:

(a) asbestos;

(b) polychlorinated biphenyls;

(c) heavy metals;

(d) chemicals;

(e) contaminants; and

(f) any other matter whether solid, liquid or gaseous form, or whether naturally occurring or man-made;

Suburban Land Agency means the agency established under section 37 of *the City Renewal Authority and Suburban Land Agency Act 2017* (ACT);

Supply has the meaning in the GST Law;

TCCS means Transport Canberra and City Services and its successors;

Territory Plan means the *Territory Plan 2008* (ACT), as amended and varied from time to time;

Territory Planning Authority means the body corporate established in accordance with the Planning Act;

Transferee is the person who buys the Land from the Buyer and who enters into a building contract with the Buyer (as builder) for the construction of a dwelling on the Land.

Utility Service includes drainage, electricity, garbage collection, sewerage, telecommunications or water;

Variation Certificate means a certificate issued under section 14-235 of the Withholding Law that covers the date of Completion;

Verge means the verge in front of the Land and includes the area between the Block Boundary and the Kerb Line, commonly known as the nature strip;

Verge Assets means all concrete footpaths, driveways, kerbs, gutters, light poles, mini pillars, street trees and grassing located on the Verge at Completion, or as varied by the Buyer with the written consent of TCCS;

Withholding Amount means, subject to clause 41.5, the Relevant Percentage of the first element of the CGT Asset's cost base (for all CGT Assets sold under this Contract) as at the Date of this Contract;

Withholding Law means Subdivision 14-D of Schedule 1 of the *Taxation Administration Act 1953* (Cth) and associated provisions;

Working Days has the meaning given to it by the *Legislation Act 2001* (ACT); and

42. INTERPRETATION

42.1 In this Contract:

(a) a reference to the Seller or to the Buyer includes the executors, administrators and permitted assigns of any of them, if an individual, and the successors or permitted assigns of any of them, if a corporation;

(b) the singular includes the plural, and the plural includes the singular;

(c) a reference to a person includes a body corporate;

(d) a term not otherwise defined has the meaning in the *Legislation Act 2001* (ACT); and

(e) a reference to an Act includes a reference to any subordinate legislation made under it or any Act which replaces it.

42.2 Headings are inserted for convenience only and are not part of this Contract.

42.3 If the time for something to be done or to happen is not a Working Day, the time is extended to the next Working Day.

42.4 If there is more than one Buyer or more than one Seller, the obligations which they undertake bind them jointly and individually.

ANNEXURE A – BACKGROUND DOCUMENTS

ATTACHMENT A

ESTATE DEVELOPMENT PLAN

A

Estate Development Plan

COOMBS ESTATE PLAN

COOMBS
MOLONGLO VALLEY

** Map is indicative only*

ACT Government
Economic Development

Land Development Agency
CANBERRA FIRST

enviro DEVELOPMENT

ATTACHMENT B

BLOCK DETAILS PLANS

B

Block Details Plans

LEGEND

- STAGE BOUNDARY
- 47 — SECTION IDENTIFIER
- 13 — BLOCK IDENTIFIER
- 450m² — BLOCK AREA (m²)
- 30.0 — BLOCK DIMENSIONS
- STORMWATER EASEMENT 2.5m WIDE
- SEWER EASEMENT 2.5m WIDE
- WATER EASEMENT 2.5m WIDE
- COMMUNITY TITLED
- BLOCK REQUIRES UTILITY MAINTENANCE ACCESS EASEMENT. REFER TO SECTION 4.9
- PROPOSED STREET TREE LOCATION (Subject to Change)
- DRIVEWAY LOCATION (Subject to Change)
- FOOTPATHS
- RETAINING WALL
- POTENTIAL MULTI UNIT DRIVEWAY (Subject to Change)
- GCP 28 Blocks 19 - 22 — GARBAGE COLLECTION POINT (Refer to Waste Collection Pad Allocation Schedule)
- * — BUSH FIRE MITIGATION MEASURES APPLY TO THESE BLOCKS. BUILDINGS TO BE CONSTRUCTED TO AUSTRALIAN STANDARD BAL-12.5 AS.3959-2009.
- # — BUSH FIRE MITIGATION MEASURES APPLY TO THESE BLOCKS. BUILDINGS TO BE CONSTRUCTED TO AUSTRALIAN STANDARD BAL-19 AS. 3959-2009.

- (A) Aspect of northern boundary of adjoining residential block is 0-9° (Refer Coombs & Wright Concept Plan Rule 63)
- (B) Aspect of northern boundary of adjoining residential block is 10-19° (Refer Coombs & Wright Concept Plan Rule 63)
- (C) Aspect of northern boundary of adjoining residential block is 20-29° (Refer Coombs & Wright Concept Plan Rule 63)
- (D) Aspect of northern boundary of adjoining residential block is 30-39° (Refer Coombs & Wright Concept Plan Rule 63)
- (E) Aspect of northern boundary of adjoining residential block is 40-50° (Refer Coombs & Wright Concept Plan Rule 63)

- INDICATIVE SOLAR SETBACK FOR LOWER FLOOR IS 1.5m +/- 0.1m AND FOR UPPER FLOOR IS 5.2m +/- 0.4m
- INDICATIVE SOLAR SETBACK FOR LOWER FLOOR IS 1.6m +/- 0.1m AND FOR UPPER FLOOR IS 5.6m +/- 0.4m
- INDICATIVE SOLAR SETBACK FOR LOWER FLOOR IS 1.8m +/- 0.1m AND FOR UPPER FLOOR IS 6.3m +/- 0.4m

NOTES:
THE ABOVE INDICATIVE SOLAR SETBACKS HAVE BEEN CALCULATED AS PER RULES IN COOMBS & WRIGHT CONCEPT PLAN RULE 63 ASSUMING LOWER FLOOR BUILDING HEIGHT IS 3M AND UPPER FLOOR BUILDING HEIGHT IS 6M TOTAL. SOLAR SETBACKS APPLY EXCEPT WHERE THE 'RESIDENTIAL ZONES -SINGLE DWELLING CODES' OR EASEMENTS HAVE GREATER SETBACKS.

IT IS THE BUYER'S RESPONSIBILITY TO ENSURE COMPLIANCE WITH THE RULES/CRITERIA IN THE 'RESIDENTIAL ZONES-SINGLE DWELLING CODES' AND COOMBS & WRIGHT CONCEPT PLAN RULE 63. THE SOLAR SETBACKS SHOWN HERE ARE ONLY EXAMPLES OF COMPLIANCE WITH THE LEGISLATION AND MAY VARY DEPENDING ON THE DESIGN OF YOUR HOUSE AND THE FINAL GRADING OF YOUR BLOCK.

PLAN SUBJECT TO SURVEY - FINAL DIMENSIONS AREAS & BLOCK NUMBERS TO BE OBTAINED FROM DEPOSITED PLANS. DISTANCES ARE IN METRES.

CONTOUR INTERVAL IS 0.5m. CONTOURS REPRESENT PRELIMINARY DESIGN CONTOURS AND MAY BE SUBJECT TO CHANGE. LEVELS SHOULD BE VERIFIED BY LESSEES.

POSITION OF HYDRAULIC & ELECTRICAL SERVICES TO BE CONFIRMED BY ENGINEERING PLANS.

STREET TREE LOCATIONS ARE SUBJECT TO CHANGE DEPENDENT ON FINAL BUILT LOCATIONS OF SERVICES AND DRIVEWAYS.

ISSUE	REASON FOR ISSUE	DATE	DESIGN	DRAWN	CHECKED	APPROVED FOR ISSUE
H	ISSUED FOR APPROVAL – ENG BASE UPDATES	27.02.12	JE	AJ	IM	AJ
I	ISSUED FOR APPROVAL – ENG BASE UPDATES	03.08.12	JE	AJ	IM	AJ
J	BLOCK AND SECTION NUMBERS UPDATE	13.03.13	JE	AJ	IM	AJ
D	ISSUED FOR APPROVAL – BLOCK SECTION NUMBERS	14.04.11	JE	AJ	IM	AJ
E	ISSUED FOR APPROVAL – ASPECTS REVIEWED	18.04.11	JE	AJ	IM	AJ
F	ISSUED FOR APPROVAL – AF, AG SOLAR SETBACKS	19.04.11	JE	AJ	IM	AJ
G	ISSUED FOR APPROVAL – PER EDP COMMENTS 04/11	09.05.11	JE	AJ	IM	AJ

CLIENT: Land Development Agency — CANBERRA FIRST

CONSULTANT: JEA — Urban Planning + Landscape Architecture
JEA + Associates Pty Ltd
Unit 5 97 Monitsauere Ave
Turner ACT 2612
Ph 02 6262 9383
F 02 6262 9343
E: jea@jea.com.au
W: www.jea.com.au

Cardno Young
ABN: 24 005 579 404
Level 2, 14 Wormald Street Symonston, ACT, 2609
Ph (02) 6112 4500 Fax (02) 6112 4599
PO Box 7377, CPBC, ACT, 2610
Web: www.cardno.com.au

PROJECT: COOMBS Residential Estate Stage 1

DRAWING: BLOCK DETAILS PLAN

SCALE @ A4: 1:1250

PROJECT No: 10/852 | DRAWING No: BDP 3 | ISSUE: J

ATTACHMENT C

BLOCK FILL PLANS

C

Block Fill Plans

LEGEND

1	BLOCK IDENTIFIER
8	SECTION IDENTIFIER
1.50 / 1.00 / 0.50	ESTIMATED FILL DEPTH (m)
	FILL
0.00	LIMIT OF FILL

NOTE:

THIS PLAN ONLY INDICATES AREAS OF FILL OF WHICH THE DEVELOPER AND ITS AGENTS ARE AWARE. IT HAS NOT BEEN CHECKED BY THE TERRITORY AND THE TERRITORY DOES NOT GUARANTEE ITS ACCURACY. IN NO WAY SHOULD THIS PLAN BE READ AS A CONCLUSIVE STATEMENT OF THE FULL EXTENT OF THE FILL THAT MAY BE FOUND ON THE LAND DEPICTED. LESSEES AND PURCHASERS SHOULD MAKE THEIR OWN INQUIRIES IN REGARD TO THE EXACT DRAINAGE, GEOTECHNICAL AND FILL CONDITIONS AFFECTING THEIR BLOCKS.

ISSUE	REASON FOR ISSUE	DATE	DESIGN	DRAWN	CHECKED	APPROVED FOR ISSUE
A	1st DRAFT FOR REVIEW	12.04.11	GZ	GZ	GG	GL
B	BLOCK LAYOUT REVISED	28.02.12	GZ	TE	GZ	PB
C	BLOCK NUMERICAL IDENTIFICATION	05.03.13	GZ	LA	GZ	MT

DRAWING STATUS
Warning unless there is an authorised JEA signature in the approved for issue column, this drawing is not approved for issue.

CLIENT
Land Development Agency
CANBERRA FIRST

CONSULTANT
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Urban Planning + Landscape Architecture
JEA + Associates Pty Ltd
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PO Box 7317, CPBC, ACT, 2610
Web: www.cardno.com.au

PROJECT
COOMBS
Residential Estate
Stage 1

DRAWING
BLOCK FILL PLAN

SCALE @ A4
1:1250

PROJECT No	DRAWING No	ISSUE
10/852	BFP 3	C

ATTACHMENT D

SEWERAGE AND STORMWATER MAINS TABLE

D

Sewerage and Stormwater Mains Table

Table 6: Sewerage and stormwater mains located in greenfield blocks

	Minimum width of '*pipe-protection-envelope*' (or service reservation where a sewer and stormwater traverses a leased block	Minimum height of pipe protection envelop above ground	Turning chamfer at 90° change of direction between side access route and rear service reservation (not req for stormwater)	Private services zone (for spoil and to lay private sanitary drains, stormwater drains and elect. cables/conduits). (not req for stormwater)	Side boundary maintenance access route (where a sewer reservation or connection is located in the rear yard). (not req for stormwater)	Side boundary emergency access route (24 hour access to a sewer manhole in the rear service reservation) (not req for stormwater)
150 to 225 mm gravity sewer 100 to 150 mm pressure pipe < 300mm stormwater Pipe invert no deeper than 2000 mm below finished ground level	2500 mm	3000 mm	2000 mm x 2000 mm recommended	Not less than 1000 mm recommended	3000 wide (2200 for blocks less than 550m²) x 2800 high. (alternative access may be negotiated, e.g. through garage openings 2200 wide x 2200 high)	1500 mm wide x 2200 mm high clear of obstruction
300 to 375 mm gravity sewer 300 to 450 mm pressure pipe > 300mm stormwater Pipe invert no deeper than 2000 mm below finished ground level	3500 mm	3000 mm	3000 mm x 3000 mm recommended	Not less than 1000 mm recommended	3000 wide (2200 for blocks less than 550m²) x 2800 high. (alternative access may be negotiated, eg through garage openings 2200 wide x 2200 high)	1500 mm wide x 2200 mm high clear of obstruction
150 to 225 mm gravity sewer 100 to 150 mm pressure pipe < 300mm stormwater Pipe invert between 2000 mm and 3000 mm below finished ground level	2500 mm	3000 mm	3000 mm x 3000 mm recommended	Not less than 1000 mm recommended	3000 wide x 3000 high (alternative access may be negotiated, e.g. through garage openings 3000 wide x 3000 high)	1500 mm wide x 2200 mm high clear of obstruction
300 to 375 mm gravity sewer 300 to 450 mm pressure pipe > 300mm stormwater Pipe invert between 2000 mm and 3000 mm below finished ground level	3500 mm	3000 mm	3000 mm x 3000 mm recommended	Not less than 2000 mm recommended	3000 wide x 3000 high (alternative access may be negotiated, e.g. through garage openings 3000 wide x 3000 high)	1500 mm wide x 2200 mm high clear of obstruction
Combined sewerage and stormwater service reservation	Subject to approval: Generally add 1000 mm to categories above	3000 mm	As above, according to size and depth of network pipe	As above, according to size and depth of network pipe	Subject to approval: generally add 1000 mm to width of categories above	As above, according to size and depth of network pipe
Any trunk sewers or sewerage mains larger than 375 mm diameter or deeper than 3000mm	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL
Any water bulk supply main	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL	Subject to site-specific approval by ActewAGL

ANNEXURE B – SPECIMEN CROWN LEASE

This is a market value lease – s263 (2) (a) (ii)
Planning Act 2023

LEASE No.

Volume

Folio

CONDITIONS APPLICABLE

MOP No.

Annexure

AUSTRALIAN CAPITAL TERRITORY

CROWN LEASE

PLANNING ACT 2023

AUSTRALIAN CAPITAL TERRITORY (PLANNING AND LAND MANAGEMENT) Act 1988 (C'th) ss. 29, 30 & 31

THE TERRITORY PLANNING AUTHORITY ON BEHALF OF THE COMMONWEALTH OF AUSTRALIA IN EXERCISING ITS FUNCTIONS GRANTS TO THE LESSEE A LEASE OF THE LAND UNDER THE *PLANNING ACT 2023* FOR THE TERM AND SUBJECT TO THE PROVISIONS SET OUT BELOW.

THE MEMORANDUM OF PROVISIONS (MOP) No. REGISTERED IN THE REGISTRAR-GENERAL'S OFFICE AND/OR ANY PROVISIONS SET OUT IN ANY ANNEXURE ARE PART OF THIS LEASE.

1. LAND

DISTRICT/DIVISION	SECTION	BLOCK	DEPOSITED PLAN	APPROXIMATE AREA
				square metres

2. LESSEE'S NAME AND ADDRESS

3. FORM OF TENANCY

4. TERM

GRANT DATE:

TERM IN YEARS: 99 FROM THE COMMENCEMENT DATE

COMMENCEMENT DATE:

EXPIRY DATE:

5. PURPOSE

SINGLE DWELLING HOUSING.

6. RESERVATIONS AND STATUTORY RESTRICTIONS

THE STATUTORY RESTRICTION(S) IS/ARE:

SECTION 370 OF THE *PLANNING ACT 2023*.

7. VARIATIONS TO MEMORANDUM OF PROVISIONS

Not Applicable

8. EXECUTION

SIGNED BY

SIGNATURE OF WITNESS

SIGNATURE OF LESSEE

NAME OF WITNESS (BLOCK LETTERS)

SIGNED BY A DELEGATE AUTHORISED TO EXECUTE THIS LEASE ON BEHALF OF THE COMMONWEALTH:

SIGNATURE

SIGNATURE OF WITNESS

NAME OF SIGNATORY (BLOCK LETTERS)

OFFICE USE ONLY

EXAMINED

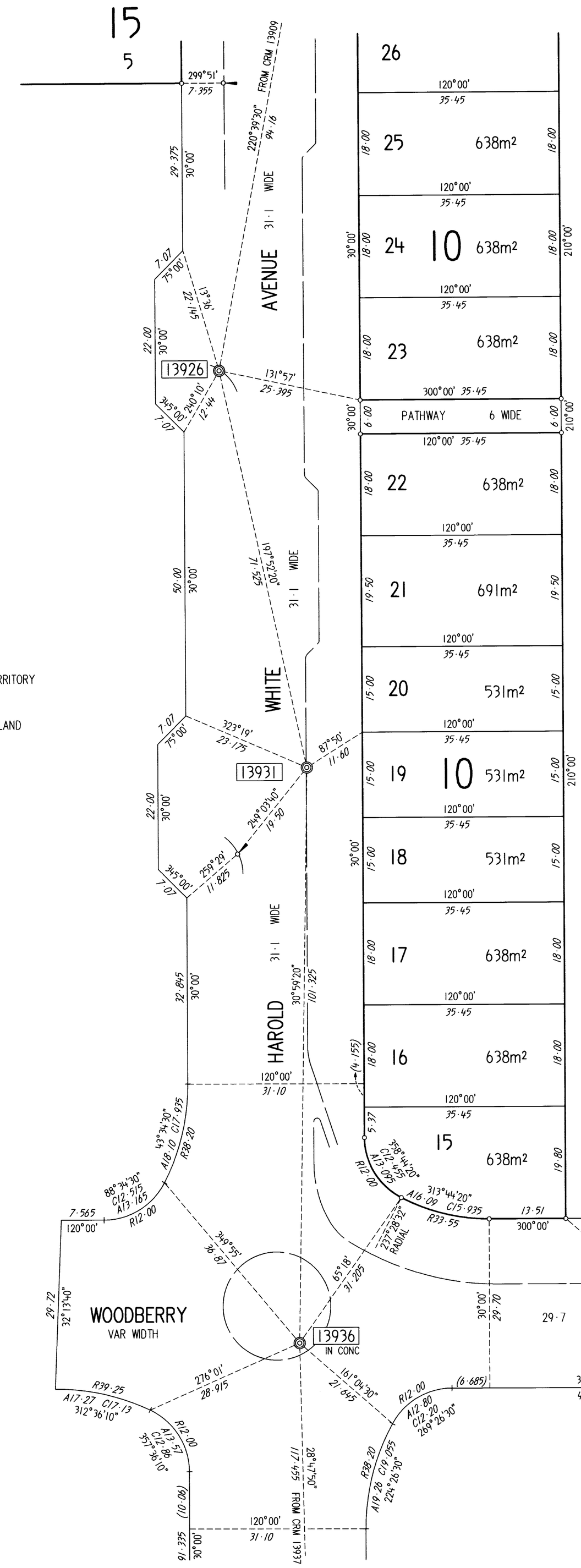
VOLUME: FOLIO

REGISTERED:

DATE:

ANNEXURE C – DEPOSITED PLAN

SEE SHEET No 2



SEE SHEET No 3

SG/AG CO-ORDINATES OF REFERENCE MARKS		
REF MARK	EASTING	NORTHING
CRM 13333	202881·86	599122·32
CRM 13337	202802·87	599065·425
CRM 13830	203165·645	599703·205
CRM 13835	202930·53	599671·74
CRM 13836	202804·01	599424·16
CRM 13904	203346·275	599506·035
CRM 13908	203206·56	599437·615
CRM 13909	203290·145	599374·89
CRM 13925	203128·86	599372·18
CRM 13926	203228·795	599303·46
CRM 13931	203206·845	599235·385
CRM 13936	203154·675	599148·52
CRM 13937	203098·10	599045·595
CRM 13940	203042·03	599330·945
CRM 13941	203002·06	599251·44
CRM 13942	202935·47	599169·585
RM R435	203062·40	598910·48
SR 1727	203273·74	599564·45
MC MARTIN ECCE	204156·335	599553·08

NOTES:

AZIMUTH A–B IS SHOWN ON SHEET 3

NTS–NOT TO SCALE

RMs 638, 651, 751, 752, 757 & 792 GONE

REFERENCE MARKS

~~Denotes G I P in road I·83 radially from T P~~

~~" C B " " I·83 " " T P~~

" PLAQUE IN KERB

" DEEP DRIVEN ROD

" DH&W IN KERB

(Except as otherwise shown)

NOTE:

All easements are 2·5 metres wide (Except as otherwise shown)

Azimuth: A–B (Strom)

Field Books:

SURVEYOR'S REFERENCE: 12086_DP1A–1

I, DAVID PETER CONWAY of MAIL McDONALD BARNSLEY Pty Ltd PO BOX 54 JAMISON ACT 2614 a surveyor registered under the Surveyors Act 2007 hereby certify that the survey represented on this plan is accurate and has been made in accordance with the Surveyors Practice Directions and was completed on 1 MAY 2014

(Signature) David Peter Conway

8/5/14 Surveyor, Registered under the Surveyors Act 2007

I certify that this plan is the plan prepared in accordance with the Districts Act 2002

8-5-2014

Surveyor-General of the ACT

THIS IS SHEET 1 OF MY PLAN IN 3 SHEETS

PLAN OF

BLOCKS 12–21 SECTION 9, BLKS 1, 15–26 SEC 10, BLKS 1–5 SEC 15 & BLKS 1–14 SEC 16

DIVISION: COOMBS

DISTRICT: MOLONGLO VALLEY

AUSTRALIAN CAPITAL TERRITORY

SCALE 1:500

0 5 10 20 30 40 METRES

Deposited in the office of the Registrar of Titles at Canberra in the Australian Capital Territory the Twelfth day of May 2014 at — minutes past ten o'clock in the fore noon

Approved

Sandra Salcedo

Deputy Registrar-General

Registrar of Titles

DEPOSITED PLAN

11208/1

*GL

X 20618/1

SG/AG CO-ORDINATES OF REFERENCE MARKS		
REF MARK	EASTING	NORTHING
CRM 13333	202881·86	599122·32
CRM 13337	202802·87	599065·425
CRM 13830	203165·645	599703·205
CRM 13835	202930·53	599671·74
CRM 13836	202804·01	599424·16
CRM 13904	203346·275	599506·035
CRM 13908	203206·56	599437·615
CRM 13909	203290·145	599374·89
CRM 13925	203128·86	599372·18
CRM 13926	203228·795	599303·46
CRM 13931	203206·845	599235·385
CRM 13936	203154·675	599148·52
CRM 13937	203098·10	599045·595
CRM 13940	203042·03	599330·945
CRM 13941	203002·06	599251·44
CRM 13942	202935·47	599169·585
RM R435	203062·40	598910·48
SR 1727	203273·74	599564·45
MC MARTIN ECCE	204156·335	599553·08

TERRITORY

LAND

AVENUE

165°15'20" 23·18

A68·315 C66·60 52°20' R87·63

R64·45 A41·555 C40·84 55°59'

MC MARTIN ECCE FD
ACTGSO PLAN
CM 171, RM3626

268°59'25" 773·995 NTS

267°11'30" 735·49 NTS

RADIAL 307°30'47"

89°31' 11·97

R64·45

129°30' 35·38

A8·45 C8·445 33°45'20"

ⓓ

SHEET No 3

SEE

FROM CRM 13830 142°04'50" 175·295

A56·165 C55·97 128°17' R194·25

SR 1727 (6·16) 73·28 120°00' (2·42)

A16·495 C14·85 R10·50 75°00'

227°17'10"

ANNABELLE

R210·00 A40·115 C40·05 131°05'40"

248°07' 18·00

186°17' 26·40

170°51' 12·035

128°50'50" 93·13

VIEW

19·75 WIDE

30°00'

358°05' 17·555

277°30' 12·67

165°00'

13904

123°54' 24·455

ROUGH STONE 120°00' RETAINING WALL 0·3 WIDE

32·20 32·50

167°28' 7·37 (14·58)

75°00' 7·07

120°00' 16·75

120°00' 31·10

(8·18)

1	663m²	2	669m²	
14	656m²	3	662m²	
13	558m²	4	562m²	
12	558m²	16	562m²	5
11	558m²	6	562m²	
10	669m²	7	675m²	
9	658m²	8	662m²	

STREET

WHITE

31·1 WIDE

TERRITORY

106·12 30°00'

207°54'40" 143·525

16·75 WIDE

CONNOLLY

21	640m²			
20	598m²			
19	598m²			
18	638m²	9		
17	531m²			
16	531m²			

PATHWAY 6 WIDE

15	638m²			
14	638m²	9		
13	721m²	12	660m²	
26	638m²	10		
25				

TERRITORY

LAND

R189·25 A&C4·865 30°44'10"

RADIAL 121°28'21"

348°22' 17·20

346°05' 6·935

R206·00 A&C5·295 30°44'10"

32·455 32·50

7·07 255°00'

358°42' 14·635

91°59' 26·615

345°00'

19·45 22·00

300°00'

83°44' 12·56

13908

126°53' 104·505

27·5 WIDE

FINEMORE

337°47' 20·325

61°35'

23·515

79°10' 15·095

27·5 WIDE STREET

13909

191°03' 21·22

A101·295 C100·09 R189·25

TERRY

RADIAL 131°57'41"

80°38' 7·73

(3·24) 8·745

120°00'

15·00 15·00 15·00 15·00 14·45

165°00' 7·07

272°04'50" 26·785

151°15' 14·545

75°00' 7·07

120°00' 30·45

208°38' 17·635

120°00' 11·00

1	2	3	4	5	
15					
586m²	515m²	515m²	515m²	656m²	

30°00' 34·375 30°00' 34·375 30°00' 34·375 30°00' 34·375 29·375 210°00'

R206·00 45°42'30" A28·95 C28·93

139°48' 7·105

139°27'26" RADIAL

10·625 319°30'

12·00 15·00 15·00 15·00 19·45

299°51' 7·355

300°00'

HAROLD

31·1 WIDE

1	634m²			
26	638m²	10		
25				

TERRITORY

LAND

TO CRM 13925 229°53'40" 101·58

TO CRM 13926 220°39'30" 94·16

SEE SHEET No 3

SEE SHEET No 1

THIS IS SHEET 2 OF MY PLAN OF 3 SHEETS
DATED 1 MAY 2014

(Signature) David Ross Conroy
Surveyor, Registered under the
Surveyors Act 2007

ⓓ PROPOSED DRAINAGE SERVICE EASEMENT
NTS-NOT TO SCALE

SURVEYOR'S REFERENCE: 12086_DP1A-1

SCALE 1:500

0 5 10 20 30 40 METRES

DEPOSITED PLAN
11208/2

*GL

X 20618/2

SG/AG CO-ORDINATES OF REFERENCE MARKS		
REF MARK	EASTING	NORTHING
CRM 13333	202881·86	599122·32
CRM 13337	202802·87	599065·425
CRM 13830	203165·645	599703·205
CRM 13835	202930·53	599671·74
CRM 13836	202804·01	599424·16
CRM 13904	203346·275	599506·035
CRM 13908	203206·56	599437·615
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CRM 13931	203206·845	599235·385
CRM 13936	203154·675	599148·52
CRM 13937	203098·10	599045·595
CRM 13940	203042·03	599330·945
CRM 13941	203002·06	599251·44
CRM 13942	202935·47	599169·585
RM R435	203062·40	598910·48
SR 1727	203273·74	599564·45
MC MARTIN ECCE	204156·335	599553·08

SHORT LINE TABLE

LINE	BEARING	DISTANCE	RADIUS	ARC
1	269°26'30"	12·20	12·00	12·80
2	224°26'30"	19·055	38·20	19·26
3	172°07'30"	7·895		
4	93°37'30"	7·59		
5	357°36'10"	12·86	12·00	13·57
6	312°36'10"	17·13	39·25	17·27
7	120°00'	7·565		
8	88°34'30"	12·515	12·00	13·165
9	43°34'30"	17·935	38·20	18·10
10	345°00'	7·07		
11	75°00'	7·07		
12	345°00'	7·07		
13	75°00'	7·07		
14	196°00'	7·025		
15	285°40'	7·07		
16	238°19'40"	7·67	94·00	7·67
17	177°14'	5·41		
18	258°43'	7·515		
19	212°57'20"	9·695	94·00	9·70
20	166°15'	7·225		
21	256°05'	6·935		
22	172°07'30"	7·895		
23	82°07'	6·14		
24	349°42'	7·625		
25	79°48'	9·20		
26	347°28'	7·37		
27	164°46'40"	17·535		

LINE	BEARING	DISTANCE	RADIUS	ARC
28	163°49'	11·19		
29	25°36'	7·98		
30	113°41'	21·52		
31	356°07'	21·705		
32	77°09'	13·155		
33	186°02'	25·32		
34	49°48'	25·155		
35	210°28'	10·77		
36	18°57'	17·03		
37	185°29'	21·935		
38	279°28'	29·81		
39	31°00'	12·54	7·75	14·61

NTS NOT TO SCALE

SURVEYOR'S REFERENCE: 12086_DP1A-1

SCALE 1:1000

0 10 20 40 60 80 METRES

THIS IS SHEET 3 OF MY PLAN OF 3 SHEETS
DATED 1 MAY 2014

(Signature) David Peter Connolly
Surveyor, Registered under the Surveyors Act 2007

DEPOSITED PLAN
11208/3

X 20618/3

*GL

ANNEXURE D – SITE CLASSIFICATION CERTIFICATE

Investigation Summary Report

Client	Suburban Land Agency	Project No.	229979.00
Project	Site Classification	Date	11 June 2024
Address	Block 23 Section 10, Coombs ACT	Reference	R.001.Rev0

1. Proposed Development

It is expected that a residential dwelling will be proposed at Block 23 Section 10, Coombs.

2. Description of Site

The site is located at Block 23, Section 10 of Coombs and gently slopes from the southeast to the northwest. At the time of investigation, the site was vacant and covered sparsely with vegetation. A concrete footpath was located to the southwest of the block.

Figure 1: Approximate site boundary and test locations (imagery from MetroMap dated 9 February 2024)

3. Classification Procedure

The field work comprised the excavation of two test pits (Pits 1 and 2) using a Cat 306 CR mini-excavator (~7 tonne) fitted with a 300 mm wide bucket to depths of 3.4 m and 1.7 m respectively. The pits were logged onsite by an undergraduate geoscientist. Dynamic cone penetrometer tests (AS 1289 6.3.2:1997) were also undertaken from the surface adjacent to each test location to provide an indication of the insitu strength profile of the site soils.

The approximate test location coordinates and RLs were taken from ACTmapi which is typically accurate to within 3 - 5 m. The coordinates are approximate only and not to be relied upon. The approximate test locations and site boundary are shown on Figure 1 above.

Details of the subsurface conditions encountered are summarised in the attached test pit logs. The logs must be read in conjunction with the attached notes that define classification methods and terms used to describe the soils and rocks. A brief description of each test pit is provided below.

Pit 1: Sandy silt topsoil to 0.2 m depth, then sandy silty clay/sandy gravelly clay fill to 3.1 m depth, overlying natural sandy silty clay to the limit of investigation depth of 3.4 m.

Pit 2: Sandy silt topsoil to 0.2 m depth, then sandy gravelly clay/sandy silty clay fill to the limit of investigation depth of 1.7 m.

No free groundwater was observed during the site investigation. However, it is noted that groundwater conditions rarely remain constant and can change seasonally due to variations in rainfall, temperature and soil permeability. Furthermore, the test pits were backfilled immediately after excavation, precluding long-term monitoring of groundwater levels. For these reasons, it is noted that the moisture condition of the site soils may vary considerably from the time of the investigation compared to at the time of construction.

4. Bulk Earthworks

Based on Douglas Partners records, controlled fill was placed within the block under Level 1 control as defined in AS 3798:2007 during subdivision construction.

5. Site Classification

The block is classified as high range Class M* (moderately reactive/filled site), based on the current profile/state on limited subsurface information and determined in general accordance with the requirements of AS 2870:2011. The classification must be reassessed should the soil profile change either by adding fill or removing soil from the block and/or if the presence of service trenches or retaining walls are within the zone of influence of the block. Reference must be made to the comments provided below.

6. Footing Systems

Reference must be made to AS 2870:2011 which indicates footing systems that are appropriate for each site classification. Given the high range nature of the site classification, consideration should be given to adopting a footing system stiffer than the typical Class M systems. All footings must found within a uniform bearing stratum of suitable strength/material, below the zone of influence of any service trenches, backfill zones, retaining walls or underground structures. Masonry walls should be articulated in accordance with current best practice. Dwelling design will need to ensure suitable drainage and uniform moisture conditions are maintained in the vicinity of the footings otherwise footing performance would be compromised.

7. Maintenance Guidelines

Reference should be made to the attached CSIRO Sheet BTF 18 'Foundation Maintenance & Footing Performance' to comments about gardens, landscaping and trees on the performance of foundation soils and in particular in respect to maintaining good surface drainage. It notes that minor cracking in most structures is inevitable, and it describes site maintenance practices aimed at minimising foundation movements that can lead to cracking damage.

8. Comments

- Additional topsoils/fill may have been spread subsequent to the investigation.
- Some variability in subsurface conditions must be anticipated.
- Site preparation prior to the construction of a dwelling should include removal of all vegetation, topsoil, uncontrolled fill, existing service pipes, footings and associated backfill material.
- Depending on the depth of site cut and trenches, rock excavation may be required.
- All new fill must be placed under controlled conditions (AS 3798:2007). If fill is placed uncontrolled, those areas would require a Class P site classification and deemed not suitable to support loading.
- It is recommended that footing excavations be inspected by a geotechnical engineer.
- Moisture condition of site soils and/or the presence of groundwater may vary considerably from time of investigation compared to at the time of construction. Groundwater seepages are highly likely after heavy or prolonged rain.
- Consideration must be given to the performance of service pipes should they be installed in fill.

9. References

AS 1289.6.3.2:1997 Rec 2013, *Soil strength and consolidation tests—Determination of the penetration resistance of a soil—9 kg dynamic cone penetrometer test*, Standards Australia.

AS 2870:2011, *Residential Slabs and Footings*, Standards Australia.

AS 3798:2007, Guidelines on Earthworks for Commercial and Residential Developments, Standards Australia.

10. Limitations

This report must be read in conjunction with the attached "Limitations" and notes "About this Report".

Douglas Partners Pty Ltd

Guanghui Meng
Experienced Geotechnical Engineer

Reviewed by

Michael Jones
Principal

Attachments:

Limitations
About this Report
Explanatory Notes
Test Pit Logs (Pits 1 and 2)
CSIRO Publication

Limitations:

Douglas Partners Pty Ltd (Douglas) has prepared this report for this project at Block 23 Section 10, Coombs ACT in accordance with Douglas' email proposal dated 31 May 2024 and acceptance received from Suburban Land Agency dated 31 May 2024. The work was carried out under Douglas' Engagement Terms. This report is provided for the exclusive use of Suburban Land Agency 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 geotechnical 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.

The scope of work for this investigation/report did not include the assessment of surface or sub-surface materials or groundwater for contaminants, within or adjacent to the site. Should evidence of fill of unknown origin be noted in the report, and in particular the presence of building demolition materials, it should be recognised that there may be some risk that such fill may contain contaminants and hazardous building materials.

About this Report

November 2023

Introduction

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

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

Copyright

Borehole and Test Pit Logs

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

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

Groundwater

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

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

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

Reports

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

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

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

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

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.

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Terminology, Symbols and Abbreviations

November 2023

Introduction to Terminology, Symbols and Abbreviations

Douglas Partners' reports, investigation logs, and other correspondence may use terminology which has quantitative or qualitative connotations. To remove ambiguity or uncertainty surrounding the use of such terms, the following sets of notes pages may be attached Douglas Partners' reports, depending on the work performed and conditions encountered:

- Soil Descriptions;
- Rock Descriptions; and
- Sampling, insitu testing, and drilling methodologies

In addition to these pages, the following notes generally apply to most documents.

Abbreviation Codes

Site conditions may also be presented in a number of different formats, such as investigation logs, field mapping, or as a written summary. In some of these formats textual or symbolic terminology may be presented using textual abbreviation codes or graphic symbols, and, where commonly used, these are listed alongside the terminology definition. For ease of identification in these note pages, textual codes are presented in these notes in the following style XW. Code usage conforms with the following guidelines:

- Textual codes are case insensitive, although herein they are generally presented in upper case; and
- Textual codes are contextual (i.e. the same or similar combinations of characters may be used in different contexts with different meanings (for example `PL` is used for plastic limit in the context of soil moisture condition, as well as in `PL(A)` for point load test result in the testing results column)).

Data Integrity Codes

Subsurface investigation data recorded by Douglas Partners is generally managed in a highly structured database environment, where records "span" between a top and bottom depth interval. Depth interval "gaps" between records are considered to introduce ambiguity, and, where appropriate, our practice guidelines may require contiguous data sets. Recording meaningful data is not always appropriate (for example assigning a "strength" to a concrete pavement) and the following codes may be used to maintain contiguity in such circumstances.

Term	Description	Abbreviation Code
Core loss	No core recovery	KL
Unknown	Information was not available to allow classification of the property. For example, when auguring in loose, saturated sand auger cuttings may not be returned.	UK
No data	Information required to allow classification of the property was not available. For example if drilling is commenced from the base of a hole predrilled by others	ND
Not Applicable	Derivation of the properties not appropriate or beyond the scope of the investigation. For example providing a description of the strength of a concrete pavement	NA

Graphic Symbols

Douglas Partners' logs contain a "graphic" column which provides a pictorial representation of the basic composition of the material. The symbols used are directly representing the material name stated in the adjacent "Description of Strata" column, and as such no specific graphic symbology legend has been provided in these notes.

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Soil Descriptions

Terminology
Symbols
Abbreviations

March 2024

Introduction

All materials which are not considered to be "in-situ rock" are described in general accordance with the soil description model of AS 1726-2017 Part 6.1.3, and can be broken down into the following description structure:

The "classification" comprises a two character "group symbol" providing a general summary of dominant soil characteristics. The "name" summarises the particle sizes within the soil which most influence its behaviour. The detailed description presents more information about composition, condition, structure, and origin of the soil.

Classification, naming and description of soils require the relative proportion of particles of different sizes within the whole soil mixture to be considered.

Particle size designation and Behaviour Model

Solid particles within a soil are differentiated on the basis of size.

The engineering behaviour properties of a soil can subsequently be modelled to be either "fine grained" (also known as "cohesive" behaviour) or "coarse grained" ("non cohesive" behaviour), depending on the relative proportion of fine or coarse fractions in the soil mixture.

Particle Size Designation	Particle Size (mm)	Behaviour Model	
		Behaviour	Approximate Dry Mass
Boulder	>200	Excluded from particle behaviour model as "oversize"	
Cobble	63 - 200		
Gravel[1]	2.36 - 63	Coarse	>65%
Sand[1]	0.075 - 2.36		
Silt	0.002 - 0.075	Fine	>35%
Clay	<0.002		

[1] – refer grain size subdivision descriptions below

The behaviour model boundaries defined above are not precise, and the material behaviour should be assumed from the name given to the material (which considers the particle fraction which dominates the behaviour, refer "component proportions" below), rather than strict observance of the proportions of particle sizes. For example, if a material is named a "Sandy CLAY", this is indicative that the material exhibits fine grained behaviour, even if the dry mass of coarse grained material may exceed 65%.

Component proportions

The relative proportion of the dry mass of each particle size fraction is assessed to be a "primary", "secondary", or "minor" component of the soil mixture, depending on its influence over the soil behaviour.

Component Proportion Designation	Definition[1]	Relative Proportion	
		In Fine Grained Soil	In Coarse Grained Soil
Primary	The component (particle size designation, refer above) which dominates the engineering behaviour of the soil	The clay/silt component with the greater proportion	The sand/gravel component with the greater proportion
Secondary	Any component which is not the primary, but is significant to the engineering properties of the soil	Any component with greater than 30% proportion	Any granular component with greater than 30%; or Any fine component with greater than 12%
Minor[2]	Present in the soil, but not significant to its engineering properties	All other components	All other components

[1] As defined in AS1726-2017 6.1.4.4

[2] In the detailed material description, minor components are split into two further sub-categories. Refer "identification of minor components" below.

Composite Materials

In certain situations, a lithology description may describe more than one material, for example, collectively describing a layer of interbedded sand and clay. In such a scenario, the two materials would be described independently, with the names preceded or followed by a statement describing the arrangement by which the materials co-exist. For example, "INTERBEDDED Silty CLAY AND SAND".

Soil Descriptions

Classification

The soil classification comprises a two character group symbol. The first character identifies the primary component. The second character identifies either the grading or presence of fines in a coarse grained soil, or the plasticity in a fine grained soil. Refer AS1726-2017 6.1.6 for further clarification.

Soil Name

For most soils, the name is derived with the primary component included as the noun (in upper case), preceded by any secondary components stated in an adjective form. In this way, the soil name also describes the general composition and indicates the dominant behaviour of the material.

Component [1]	Prominence in Soil Name
Primary	Noun (eg "CLAY")
Secondary	Adjective modifier (eg "Sandy")
Minor	No influence

[1] – for determination of component proportions, refer component proportions on previous page

For materials which cannot be disaggregated, or which are not comprised of rock or mineral fragments, the names "ORGANIC MATTER" or "ARTIFICIAL MATERIAL" may be used, in accordance with AS1726-2017 Table 14.

Commercial or colloquial names are not used for the soil name where a component derived name is possible (for example "Gravelly SAND" rather than "CRACKER DUST").

Materials of "fill" or "topsoil" origin are generally assigned a name derived from the primary/secondary component (where appropriate). In log descriptions this is preceded by uppercase "FILL" or "TOPSOIL". Origin uncertainty is indicated in the description by the characters (?), with the degree of uncertainty described (using the terms "probably" or "possibly" in the origin column, or at the end of the description).

Identification of minor components

Minor components are identified in the soil description immediately following the soil name. The minor component fraction is usually preceded with a term indicating the relative proportion of the component.

Minor Component Proportion Term	Relative Proportion	
	In Fine Grained Soil	In Coarse Grained Soil
With	All fractions: 15-30%	Clay/silt: 5-12% sand/gravel: 15-30%
Trace	All fractions: 0-15%	Clay/silt: 0-5% sand/gravel: 0-15%

The terms "with" and "trace" generally apply only to gravel or fine particle fractions. Where cobbles/boulders are encountered in minor proportions (generally less than about 12%) the term "occasional" may be used. This term describes the sporadic distribution of the material within the confines of the investigation excavation only, and there may be considerable variation in proportion over a wider area which is difficult to factually characterise due to the relative size of the particles and the investigation methods.

Soil Composition

Plasticity

Descriptive Term	Laboratory liquid limit range	
	Silt	Clay
Non-plastic materials	Not applicable	Not applicable
Low plasticity	≤50	≤35
Medium plasticity	Not applicable	>35 and ≤50
High plasticity	>50	>50

Note, Plasticity descriptions generally describe the plasticity behaviour of the whole of the fine grained soil, not individual fine grained fractions.

Grain Size

Type		Particle size (mm)
Gravel	Coarse	19 - 63
	Medium	6.7 - 19
	Fine	2.36 – 6.7
Sand	Coarse	0.6 - 2.36
	Medium	0.21 - 0.6
	Fine	0.075 - 0.21

Grading

Grading Term	Particle size (mm)
Well	A good representation of all particle sizes
Poorly	An excess or deficiency of particular sizes within the specified range
Uniformly	Essentially of one size
Gap	A deficiency of a particular size or size range within the total range

Note, AS1726-2017 provides terminology for additional attributes not listed here.

Soil Condition

Moisture

The moisture condition of soils is assessed relative to the plastic limit for fine grained soils, while for coarse grained soils it is assessed based on the appearance and feel of the material. The moisture condition of a material is considered to be independent of stratigraphy (although commonly these are related), and this data is presented in its own column on logs.

Applicability	Term	Tactile Assessment	Abbreviation code
Fine	Dry of plastic limit	Hard and friable or powdery	w<PL
	Near plastic limit	Can be moulded	w=PL
	Wet of plastic limit	Water residue remains on hands when handling	w>PL
	Near liquid limit	"oozes" when agitated	w=LL
	Wet of liquid limit	"oozes"	w>LL
Coarse	Dry	Non-cohesive and free running	D
	Moist	Feels cool, darkened in colour, particles may stick together	M
	Wet	Feels cool, darkened in colour, particles may stick together, free water forms when handling	W

The abbreviation code NDF, meaning "not-assessable due to drilling fluid use" may also be used.

Note, observations relating to free ground water or drilling fluids are provided independent of soil moisture condition.

Consistency/Density/Compaction/Cementation/Extremely Weathered Material

These concepts give an indication of how the material may respond to applied forces (when considered in conjunction with other attributes of the soil). This behaviour can vary independent of the composition of the material, and on logs these are described in an independent column and are generally mutually exclusive (i.e it is inappropriate to describe both consistency and compaction at the same time). The method by which the behaviour is described depends on the behaviour model and other characteristics of the soil as follows:

- In fine grained soils, the "consistency" describes the ease with which the soil can be remoulded, and is generally correlated against the materials undrained shear strength;
- In granular materials, the relative density describes how tightly packed the particles are, and is generally correlated against the density index;
- In anthropogenically modified materials, the compaction of the material is described qualitatively;
- In cemented soils (both natural and anthropogenic), the cemented "strength" is described qualitatively, relative to the difficulty with which the material is disaggregated; and
- In soils of extremely weathered material origin, the engineering behaviour may be governed by relic rock features, and expected behaviour needs to be assessed based the overall material description.

Quantitative engineering performance of these materials may be determined by laboratory testing or estimated by correlated field tests (for example penetration or shear vane testing). In some cases, performance may be assessed by tactile or other subjective methods, in which case investigation logs will show the estimated value enclosed in round brackets, for example (VS).

Consistency (fine grained soils)

Consistency Term	Tactile Assessment	Undrained Shear Strength (kPa)	Abbreviation Code
Very soft	Extrudes between fingers when squeezed	<12	VS
Soft	Mouldable with light finger pressure	>12 - ≤25	S
Firm	Mouldable with strong finger pressure	>25 - ≤50	F
Stiff	Cannot be moulded by fingers	>50 - ≤100	St
Very stiff	Indented by thumbnail	>100 - ≤200	VSt
Hard	Indented by thumbnail with difficulty	>200	H
Friable	Easily crumbled or broken into small pieces by hand	-	Fr

Relative Density (coarse grained soils)

Relative Density Term	Density Index	Abbreviation Code
Very loose	<15	VL
Loose	>15 - ≤35	L
Medium dense	>35 - ≤65	MD
Dense	>65 - ≤85	D
Very dense	>85	VD

Note, tactile assessment of relative density is difficult, and generally requires penetration testing, hence a tactile assessment guide is not provided.

Compaction (anthropogenically modified soil)

Compaction Term	Abbreviation Code
Well compacted	WC
Poorly compacted	PC
Moderately compacted	MC
Variably compacted	VC

Cementation (natural and anthropogenic)

Cementation Term	Abbreviation Code
Moderately cemented	MOD
Weakly cemented	WEK

Extremely Weathered Material

AS1726-2017 considers weathered material to be soil if the unconfined compressive strength is less than 0.6 MPa (i.e. less than very low strength rock). These materials may be identified as "extremely weathered material" in reports and by the abbreviation code XWM on log sheets. This identification is not correlated to any specific qualitative or quantitative behaviour, and the engineering properties of this material must therefore be assessed according to engineering principles with reference to any relic rock structure, fabric, or texture described in the description.

Soil Origin

Term	Description	Abbreviation Code
Residual	Derived from in-situ weathering of the underlying rock	RS
Extremely weathered material	Formed from in-situ weathering of geological formations. Has strength of less than 'very low' as per as1726 but retains the structure or fabric of the parent rock.	XWM
Alluvial	Deposited by streams and rivers	ALV
Fluvial	Deposited by channel fill and overbank (natural levee, crevasse splay or flood basin)	FLV
Estuarine	Deposited in coastal estuaries	EST
Marine	Deposited in a marine environment	MAR
Lacustrine	Deposited in freshwater lakes	LAC
Aeolian	Carried and deposited by wind	AEO
Colluvial	Soil and rock debris transported down slopes by gravity	COL
Slopewash	Thin layers of soil and rock debris gradually and slowly deposited by gravity and possibly water	SW
Topsoil	Mantle of surface soil, often with high levels of organic material	TOP
Fill	Any material which has been moved by man	FILL
Littoral	Deposited on the lake or seashore	LIT
Unidentifiable	Not able to be identified	UID

Cobbles and Boulders

The presence of particles considered to be "oversize" may be described using one of the following strategies:

- Oversize encountered in a minor proportion (when considered relative to the wider area) are noted in the soil description; or
- Where a significant proportion of oversize is encountered, the cobbles/boulders are described independent of the soil description, in a similar manner to composite soils (described above) but qualified with "MIXTURE OF".

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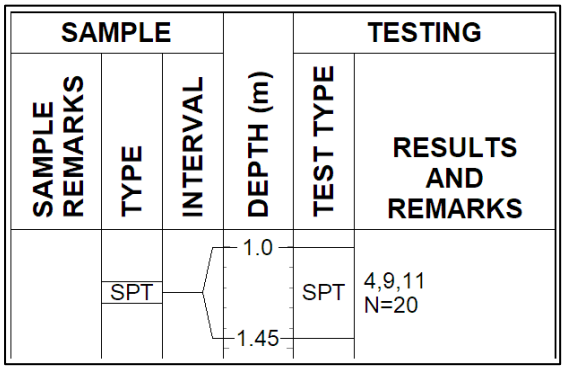
Sampling, Testing and Excavation Methodology

Terminology
Symbols
Abbreviations

March 2024

Sampling and Testing

A record of samples retained, and field testing performed is usually shown on a Douglas Partners' log with samples appearing to the left of a depth scale, and selected field and laboratory testing (including results, where relevant) appearing to the right of the scale, as illustrated below:



Sampling

The type or intended purpose for which a sample was taken is indicated by the following abbreviation codes.

Sample Type	Code
Auger sample	A
Acid Sulfate sample	ASS
Bulk sample	B
Core sample	C
Disturbed sample	D
Environmental sample	ES
Gas sample	G
Piston sample	P
Sample from SPT test	SPT
Undisturbed tube sample	U[1]
Water sample	W
Material Sample	MT
Core sample for unconfined compressive strength testing	UCS

[1] – numeric suffixes indicate tube diameter/width in mm

The above codes only indicate that a sample was retained, and not that testing was scheduled or performed.

Field and Laboratory Testing

A record that field and laboratory testing was performed is indicated by the following abbreviation codes.

Test Type	Code
Pocket penetrometer (kPa)	PP
Photo ionisation detector (ppm)	PID
Standard Penetration Test x/y =x blows for y mm penetration HB = hammer bouncing HW = fell under weight of hammer	SPT
Shear vane (kPa)	V
Unconfined compressive strength, (MPa)	UCS

Field and laboratory testing (continued)

Test Type	Code
Point load test, (MPa), axial (A), diametric (D), irregular (I)	PLT(_)
Dynamic cone penetrometer, followed by blow count penetration increment in mm (cone tip, generally in accordance with AS1289.6.3.2)	DCP/150
Perth sand penetrometer, followed by blow count penetration increment in mm (flat tip, generally in accordance with AS1289.6.3.3)	PSP/150

Groundwater Observations

▷	seepage/inflow
▽	standing or observed water level
NFGWO	no free groundwater observed
OBS	observations obscured by drilling fluids

Drilling or Excavation Methods/Tools

The drilling/excavation methods used to perform the investigation may be shown either in a dedicated column down the left-hand edge of the log, or stated in the log footer. In some circumstances abbreviation codes may be used.

Method	Abbreviation Code
Direct Push	DP
Solid flight auger. Suffixes: /T = tungsten carbide tip, /V = v-shaped tip	AD[1]
Air Track	AT
Diatube	DT[1]
Hand auger	HA[1]
Hand tools (unspecified)	HAND
Existing exposure	X
Hollow flight auger	HSA[1]
HQ coring	HQ3
HMLC series coring	HMLC
NMLC series coring	NMLC
NQ coring	NQ3
PQ coring	PQ3
Predrilled	PD
Push tube	PT[1]
Ripping tyne/ripper	R
Rock roller	RR[1]
Rock breaker/hydraulic hammer	EH
Sonic drilling	SON[1]
Mud/blade bucket	MB[1]
Toothed bucket	TB[1]
Vibrocore	VC[1]
Vacuum excavation	VE
Wash bore (unspecified bit type)	WB[1]

[1] – numeric suffixes indicate tool diameter/width in mm

Douglas PARTNERS

TEST PIT LOG

CLIENT: Suburban Land Agency
PROJECT: Site Classification
LOCATION: Block 23 Section 10, Coombs, ACT

SURFACE LEVEL: 557 AHD
COORDINATE: E:686012, N:6089270
DATUM/GRID: MGA2020 Zone 55
DIP/AZIMUTH: 90°/090°

LOCATION ID: 1
PROJECT No: 229979.00
DATE: 04/06/24
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
04/06/24 No free groundwater observed		0.20	TOPSOIL / Sandy SILT (ML): dark brown; medium plasticity; fine to coarse sand; with rootlets.		TOP	NA	w<PL					DCP9/150	5 10 15 24 refusal
			FILL / Silty Sandy CLAY (CI): brown; medium plasticity; fine to coarse sand.		FILL	H	w<PL		D		0.40		
		0.60	FILL / Sandy Gravelly CLAY (CH), with silt: brown mottled grey red; high plasticity; fine to coarse sand; fine gravel.		FILL	(VSt) to (H)	w<PL		D		0.80		
	556	1									1		
		1.10	FILL / Silty Sandy CLAY (CH), with gravel: dark grey; high plasticity; fine to coarse sand; fine gravel.		FILL	(VSt) to (H)	w<PL to w=PL		D		1.30		
	555	2.00	FILL / Sandy CLAY (CH), with gravel: brown mottled grey yellow; high plasticity; fine to coarse sand; fine to coarse gravel.		FILL	(VSt) to (H)	w<PL		D		1.90		
									D		2.20		
									D		2.80		
	554	3									3		
		3.10	Silty Sandy CLAY (CH), with ironstone nodules: brown; high plasticity; fine to coarse sand.		RS	(VSt) to (H)	w<PL		D		3.20		
			Test Pit discontinued at 3.40m 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.

PLANT: CAT 306 CR mini excavator
METHOD: 600mm wide toothed bucket
REMARKS: Surface levels and coordinates are approximate only and must not be relied upon

OPERATOR: Bingley Electrical Pty Ltd
LOGGED: WT

Refer to explanatory notes for symbol and abbreviation definitions

TEST PIT LOG

CLIENT: Suburban Land Agency
PROJECT: Site Classification
LOCATION: Block 23 Section 10, Coombs, ACT

SURFACE LEVEL: 559 AHD
COORDINATE: E:686028, N:6089248
DATUM/GRID: MGA2020 Zone 55
DIP/AZIMUTH: 90°/090°

LOCATION ID: 2
PROJECT No: 229979.00
DATE: 04/06/24
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
04/06/24 No free groundwater observed	0.20	TOPSOIL / Sandy SILT (ML): dark grey; low plasticity; fine to coarse sand; with rootlets. FILL.		TOP and FILL	NA	w<PL					DCP9/150	5: 22
	0.40	FILL / Sandy Gravelly CLAY (CI): brown; medium plasticity; fine to coarse gravel.		FILL	(H)	w<PL		D		0.30		10: refusal 24
	559 1 1.10	FILL / Silty Sandy CLAY (CH): brown mottled grey; high plasticity; fine to coarse sand.		FILL	(VSt) to (H)	w<PL		D		0.80 1		15
		FILL / Silty Sandy CLAY (CH): dark grey; high plasticity; fine to coarse sand.		FILL	(VSt) to (H)	w<PL		D		1.50		
		Test Pit discontinued at 1.70m depth. Limit of investigation.										
	557 2											
	556 3											

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: CAT 306 CR mini excavator
OPERATOR: Bingley Electrical Pty Ltd
LOGGED: WT
METHOD: 600mm wide toothed bucket
REMARKS: Surface levels and coordinates are approximate only and must not be relied upon

Refer to explanatory notes for symbol and abbreviation definitions

Douglas PARTNERS

FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE

Understanding and preventing soil-related building movement

This Building Technology Resource is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking.

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the home owner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

SOIL TYPES

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. Table 1 below is a reproduction of Table 2.1 from Australian Standard AS 2870-2011, Residential slabs and footings.

CAUSES OF MOVEMENT

SETTLEMENT DUE TO CONSTRUCTION

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction but has been known to take many years in exceptional cases.

These problems may be the province of the builder and should be taken into consideration as part of the preparation of the site for construction.

EROSION

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

SATURATION

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume, particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

SEASONAL SWELLING AND SHRINKAGE OF SOIL

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below, from AS 2870). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

SHEAR FAILURE

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.

In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

TREE ROOT GROWTH

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.

TABLE 1. GENERAL DEFINITIONS OF SITE CLASSES.

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites, which may experience only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes
H1	Highly reactive clay sites, which may experience high ground movement from moisture changes
H2	Highly reactive clay sites, which may experience very high ground movement from moisture changes
F	Extremely reactive sites, which may experience extreme ground movement from moisture changes

Source: Reproduced with the permission of Standards Australia Limited © 2011. Copyright in AS 2870-2011 Residential slabs and footings vests in Standards Australia Limited.

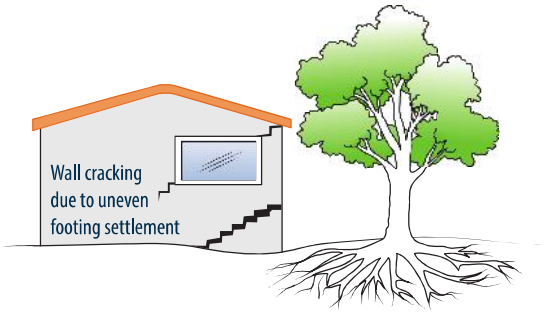


FIGURE 1 Trees can cause shrinkage and damage.

- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

UNEVENNESS OF MOVEMENT

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior through absorption. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Shrinkage usually begins on the side of the building where the sun's heat is greatest.

EFFECTS OF UNEVEN SOIL MOVEMENT ON STRUCTURES

EROSION AND SATURATION

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpends).

Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

SEASONAL SWELLING/SHRINKAGE IN CLAY

Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.

As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the external footings. The doming is accentuated, and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry, and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

MOVEMENT CAUSED BY TREE ROOTS

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

COMPLICATIONS CAUSED BY THE STRUCTURE ITSELF

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

EFFECTS ON FULL MASONRY STRUCTURES

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also

exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.

The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

EFFECTS ON FRAMED STRUCTURES

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation causes a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

EFFECTS ON BRICK VENEER STRUCTURES

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

WATER SERVICE AND DRAINAGE

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem. Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.
- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

SERIOUSNESS OF CRACKING

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. Table 2 below is a reproduction of Table C1 of AS 2870-2011.

AS 2870-2011 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

PREVENTION AND CURE

PLUMBING

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

GROUND DRAINAGE

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject may be regarded as an area for an expert consultant.

PROTECTION OF THE BUILDING PERIMETER

It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving should extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill.

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

CONDENSATION

In buildings with a subfloor void, such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

TABLE 2. CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS.

Description of typical damage and required repair	Approximate crack width limit	Damage category
Hairline cracks	<0.1 mm	0 – Negligible
Fine cracks which do not need repair	<1 mm	1 – Very Slight
Cracks noticeable but easily filled. Doors and windows stick slightly.	<5 mm	2 – Slight
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired.	5–15 mm (or a number of cracks 3 mm or more in one group)	3 – Moderate
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted.	15–25 mm but also depends on number of cracks	4 – Severe

Warning: Although this Building Technology Resource deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders, and mould.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

THE GARDEN

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

EXISTING TREES

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

INFORMATION ON TREES, PLANTS AND SHRUBS

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information.

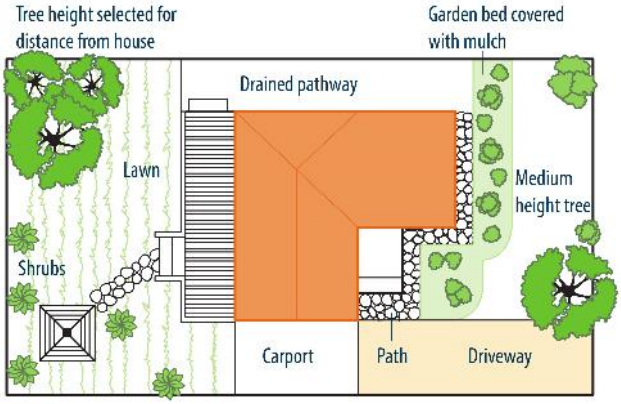


FIGURE 2 Gardens for a reactive site.

EXCAVATION

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

REMEDIATION

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the home owner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

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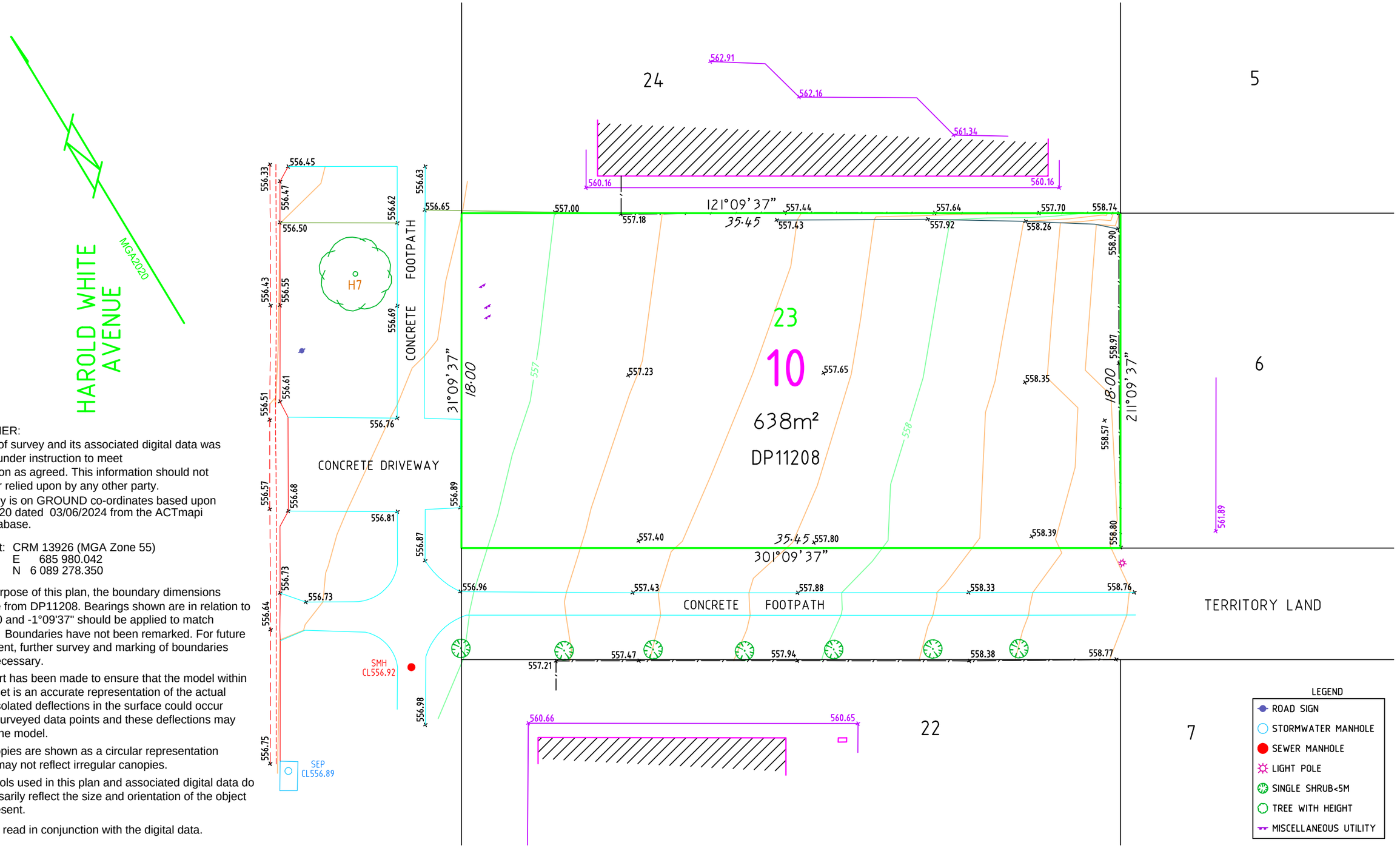

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This survey is on GROUND co-ordinates based upon a MGA 2020 dated 03/06/2024 from the ACTmapi online database.

Base Point: CRM 13926 (MGA Zone 55)
E 685 980.042
N 6 089 278.350

For the purpose of this plan, the boundary dimensions shown are from DP11208. Bearings shown are in relation to MGA 2020 and -1°09'37" should be applied to match DP11208. Boundaries have not been remarked. For future development, further survey and marking of boundaries may be necessary.

Every effort has been made to ensure that the model within this data set is an accurate representation of the actual surface. Isolated deflections in the surface could occur between surveyed data points and these deflections may not be in the model.

Tree canopies are shown as a circular representation only and may not reflect irregular canopies.

The symbols used in this plan and associated digital data do not necessarily reflect the size and orientation of the object they represent.

Plan to be read in conjunction with the digital data.

CLIENT

SUBURBAN LAND AGENCY

REVISION		DATE	ZONE

Contour Interval 0.25m
Datum A.H.D
BM CRM 13926
RL 556.564

Scale 1:200 0 2 4 8

Surveyed	B. SKEERS	03/06/2024
Drawn	B. SKEERS	03/06/2024
Checked	B. SKEERS	03/06/2024
Approved	S. NOAKES	03/06/2024

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DETAIL SURVEY
BLOCK 23 SECTION 10
34 HAROLD WHITE AVENUE
COOMBS

Project No. 22024-066 **Rev**

Sheet No. 1 of 1 22024-066_DT_001.dwg

 A3

ANNEXURE E – CLEARANCE CERTIFICATE

Australian Government
Australian Taxation Office

SUBURBAN LAND AGENCY
C/o MATHILDE CASTELLA
480 NORTHBOURNE AVENUE
DICKSON ACT 2602

Our reference: 2410894950853
Phone: 13 28 66

15 January 2024

Your foreign resident capital gains withholding clearance certificate

› Purchasers are not required to withhold and pay an amount
› Provide a copy to the purchaser and retain a copy for your records

Hello

We have decided that purchasers are not required to withhold and pay an amount. Your certificate is below.

Reference number	2410894950853
Vendor name	SUBURBAN LAND AGENCY
Vendor address	480 NORTHBOURNE AVENUE DICKSON ACT 2602
Clearance certificate period	11 January 2024 to 13 January 2029

The Commissioner may withdraw this clearance certificate at any time if we obtain further information indicating you are a foreign resident.

Yours sincerely

John Ford
Deputy Commissioner of Taxation

NEED HELP?

You can find out more about foreign resident capital gains withholding on our website at ato.gov.au/FRCGW

CONTACT US

If you have any questions, contact us between 8:00am and 5:00pm Australian Eastern Standard Time, Monday to Friday on:

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