

BASIX™ Certificate

Building Sustainability Index

www.planningportal.nsw.gov.au/development-and-assessment/basix

Single Dwelling

Certificate number: 1179704S_03

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.planningportal.nsw.gov.au/definitions

This certificate is a revision of certificate number 1179704S lodged with the consent authority or certifier on 12 April 2021 with application DA 2021/0319.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environment Planning and Assessment Regulation 2000

Secretary

Date of issue: Tuesday, 03 June 2025

To be valid, this certificate must be lodged within 3 months of the date of issue.



When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate 0011961745.

Project summary

| | |
|---------------------------|--|
| Project name | 4326A Church Point - Downes_03 |
| Street address | 190 MCCARRS CREEK STREET CHURCH POINT 2105 |
| Local Government Area | Northern Beaches Council |
| Plan type and plan number | Deposited Plan 20097 |
| Lot no. | 7 |
| Section no. | - |
| Project type | separate dwelling house |
| No. of bedrooms | 4 |

Project score

| | | |
|---------------------|--------|-------------|
| Water | ✓ 40 | Target 40 |
| Thermal Performance | ✓ Pass | Target Pass |
| Energy | ✓ 94 | Target 50 |
| Materials | ✓ -1 | Target n/a |

Certificate Prepared by

Name / Company Name: Lin & Associates Pty Ltd

ABN (if applicable):

Description of project

Project address

| | |
|---------------------------|--|
| Project name | 4326A Church Point - Downes_03 |
| Street address | 190 MCCARRS CREEK STREET CHURCH POINT 2105 |
| Local Government Area | Northern Beaches Council |
| Plan type and plan number | Deposited Plan 20097 |
| Lot no. | 7 |
| Section no. | - |

Project type

| | |
|-----------------|-------------------------|
| Project type | separate dwelling house |
| No. of bedrooms | 4 |

Site details

| | |
|--|-------|
| Site area (m ²) | 436 |
| Roof area (m ²) | 178 |
| Conditioned floor area (m ²) | 297.0 |
| Unconditioned floor area (m ²) | 6.0 |
| Total area of garden and lawn (m ²) | 224 |
| Roof area of the existing dwelling (m ²) | 0 |

Assessor details and thermal loads

| | |
|---|-------------|
| NatHERS assessor number | DMN/19/1894 |
| NatHERS certificate number | 0011961745 |
| Climate zone | 56 |
| Area adjusted cooling load (MJ/m ² .year) | 15 |
| Area adjusted heating load (MJ/m ² .year) | 36 |
| Ceiling fan in at least one bedroom | Yes |
| Ceiling fan in at least one living room or other conditioned area | Yes |

Project score

| | | |
|---------------------|--------|-------------|
| Water | ✓ 40 | Target 40 |
| Thermal Performance | ✓ Pass | Target Pass |
| Energy | ✓ 94 | Target 50 |
| Materials | ✓ -1 | Target n/a |

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|------------------------------|-----------------|
| Landscape | | | |
| The applicant must plant indigenous or low water use species of vegetation throughout 120 square metres of the site. | ✓ | ✓ | |
| Fixtures | | | |
| The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development. | | ✓ | ✓ |
| The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development. | | ✓ | ✓ |
| The applicant must install taps with a minimum rating of 4 star in the kitchen in the development. | | ✓ | |
| The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development. | | ✓ | |
| Alternative water | | | |
| Rainwater tank | | | |
| The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities. | ✓ | ✓ | ✓ |
| The applicant must configure the rainwater tank to collect rain runoff from at least 90 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). | | ✓ | ✓ |
| The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> the cold water tap that supplies each clothes washer in the development at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) | | ✓ ✓ | ✓ ✓ |

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| Swimming Pool | | | |
| The swimming pool must not have a volume greater than 30 kilolitres. | ✓ | ✓ | |
| The swimming pool must be shaded. | ✓ | ✓ | |
| The swimming pool must be outdoors. | ✓ | ✓ | |

| Thermal Comfort Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| Simulation Method | | | |
| Assessor details and thermal loads | | | |
| The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development. | | | |
| The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol. | | | |
| The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate. | | | |
| The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications. | ✓ | ✓ | ✓ |
| The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications. | | ✓ | ✓ |
| The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate. | ✓ | ✓ | ✓ |

Thermal Comfort Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

Construction

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.



Floor and wall construction

Area

floor - concrete slab on ground

88.0 square metres

floor - suspended floor/open subfloor

33.0 square metres

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| Hot water | | | |
| The applicant must install the following hot water system in the development, or a system with a higher energy rating: solar (electric boosted) with a performance of 31 to 35 STCs or better. | ✓ | ✓ | ✓ |
| Cooling system | | | |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The cooling system must provide for day/night zoning between living areas and bedrooms. | | ✓ | ✓ |
| Heating system | | | |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The heating system must provide for day/night zoning between living areas and bedrooms. | | ✓ | ✓ |
| Ventilation | | | |
| The applicant must install the following exhaust systems in the development: | | | |
| At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | ✓ | ✓ |
| Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | ✓ | ✓ |
| Laundry: individual fan, ducted to façade or roof; Operation control: interlocked to light | | ✓ | ✓ |
| Artificial lighting | | | |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|---|---|
| <p>The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:</p> <ul style="list-style-type: none"> • at least 4 of the bedrooms / study; • at least 3 of the living / dining rooms; • the kitchen; • all bathrooms/toilets; • the laundry; • all hallways; | | <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> | <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> <div>✓</div> |
| Natural lighting | | | |
| The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting. | ✓ | ✓ | ✓ |
| The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting. | ✓ | ✓ | ✓ |
| Swimming pool | | | |
| The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): electric heat pump | | ✓ | |
| Alternative energy | | | |
| The applicant must install a photovoltaic system with the capacity to generate at least 6 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system. | ✓ | ✓ | ✓ |
| Other | | | |
| The applicant must install an induction cooktop & electric oven in the kitchen of the dwelling. | | ✓ | |

Energy Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

The applicant must install a fixed outdoor clothes drying line as part of the development.



Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a  in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a  in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.


Assessor Construction Summary

Project: **Address:** 190 McCarrs Creek Road Church Point NSW
Applicant: Adam and Katrina Bacon

Contact: Name: Peter Downes
Contact: peter@peterdownes.com.au

| | | |
|------------------|-----------------|-----------------------------------|
| Assessor: | Name: | Ailin Zhang |
| | Address: | PO Box 5080. Sth Turramurra. 2074 |
| | Contact: | 0412-988088 |

Company: Victor Lin & Associates
Number: DMN/19/1894
Email: Ailin@linassociates.com.au

| | | | | |
|--|------------------------|---|---------------------|---|
| Ext. Walls: | Construction | Insulation | Colour | Details |
| | Weatherboard Cavity | R3.5 | Med | As per plans |
| | Lined Concrete | R3.5 | | Level 1 |
| Int. Walls: | Construction | | | Details |
| | Plasterboard | R2.7 | | All internal walls |
| Floors: | Construction | Insulation | | Details |
| | Concrete slab | None | | As per plans |
| | Timber | None | | As per plans |
| | | R3.0 | | Under all suspended timber floor to external air (level 2,3) |
| Floor Cover: | Material | | | Details |
| | Timber/Tile/Carpet | | | As per plans |
| Ceilings: | Construction | Insulation | | Details |
| | Plasterboard | R6.0 | | Under all roofs and in ceilings with deck above |
| Roof: | Construction | Insulation | Colour | Details |
| | Metal | R1.3 60mm Anticon | Med | As per plans |
| Windows: | Product ID | Uw/SHGCw | Frame | Window No. |
| | Generic | 2.60 / 0.53 | Double Argon filled | PVC |
| | | 2.60 / 0.50 | | All fixed & sliding windows and stacker doors |
| | | | | All tilt & turn windows |
| Skylights: | Product ID | Glass | Frame | Uw/SHGCw |
| | n/a | | | Details |
| Other: | Orientation | Terrain | Weatherseals | Climate Zone |
| | 25 | Suburban | Yes | 56 |
| Recessed Downlights | | | | |
| YES - SEALED TYPE ONLY | | | | |
| 90mm LED at 1 per 5 sqm of ceiling space | | | | |
| Overshadowing Details: | Other Project Building | | | |
| Assessment: | Drawings: | 190 McCarrs Creeek Road Church Point. Dwgs as stamped | | |
| | File Ref: | 4326A.02 | | |
| | Software: | BERS Pro 4.4 | | |
| <div><div><div><div><div><div></div><div>6.0</div></div><div><div></div><div>50.8</div></div><div><div></div><div>50.8</div></div></div><div><div></div><div>50.8</div></div><div><div></div><div>50.8</div></div></div><div><div></div><div>50.8</div></div><div><div></div><div>50.8</div></div></div><div><div></div><div>50.8</div></div><div><div></div><div>50.8</div></div></div> <div><div>0011961745</div><div>03 Jun 2025</div><div>Assessor: Ailin Zhang</div><div>Accreditation No. DMN19-1894</div><div>Address</div><div>Unit House, 190 McCarrs</div><div>Creeek Road,</div><div>Church Point, NSW,</div><div>2105</div><div></div><div>hslr.com.au</div></div> | | | | |

| | | | |
|-----------------------|------------|-------|--------------|
| Certification Number: | 0011961745 | Date: | 04-June-2025 |
|-----------------------|------------|-------|--------------|

| House No. | Insulation Summary (refer also to table above) | | | | | | | | |
|-----------|--|--------------------|---------|---------|------|--|--|--|----------------------|
| | Conditioned Area | Unconditioned Area | Heating | Cooling | Star | | | SEALED Recessed Downlights ONLY | Sealed exhaust vents |
| House | 297 | 6 | 35.5 | 15.3 | | | | X | X |

Disclaimer: By using this summary you are accepting all the terms of this disclaimer notice. While every effort is made to ensure that the content of this summary is accurate, the summary is provided "as is" and Victor Lin & Associates Pty Ltd, makes no representations or warranties in relation to the accuracy or completeness of the information found on it. In no event will Victor Lin & Associates Pty Ltd, be liable for any damages whatsoever for any differences between this summary and the NatHERS Universal Certificates that relate to this project. You accept that it is your responsibility to check the Universal Certificates and comply with any differences that may exist on those certificates.



0011961745 **03 Jun 2025**

Assessor Ailin Zhang

Accreditation No. DMN/19/1894

Address

Unit House, 190 McCarrs
Creek Road,
Church Point, NSW,
2105

50.8
MJ/m²

www.nathers.gov.au



hstar.com.au

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0011961745

Generated on 03 Jun 2025 using BERS Pro v4.4.1.5 (3.21)

Property

Address Unit House, 190 McCarrs Creeek Road,
Church Point , NSW , 2105

Lot/DP 7/20097

NCC Class* 1A

Type New Dwelling

Plans

Main plan A3 2012 00-12

Prepared by Downes

Construction and environment

| Assessed floor area (m ²)* | Exposure type |
|--|-----------------------------|
| Conditioned* 297.0 | Suburban |
| Unconditioned* 6.0 | NatHERS climate zone |
| Total 303.0 | 56 |
| Garage 0.0 | |



Accredited assessor

Name Ailin Zhang

Business name Victor Lin Associates Pty Ltd

Email ailin@linassociates.com.au

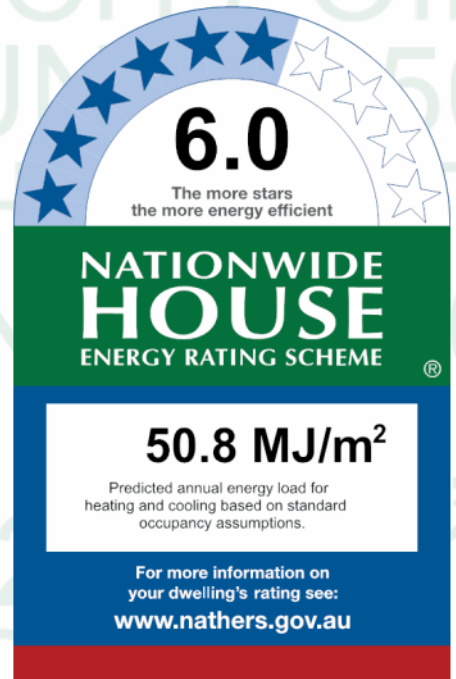
Phone 1800884199

Accreditation No. DMN/19/1894

Assessor Accrediting Organisation

Design Matters National

Declaration of interest Declaration not completed



Thermal performance

| Heating | Cooling |
|-------------------|-------------------|
| 35.5 | 15.3 |
| MJ/m ² | MJ/m ² |

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=BOCQOqTID. When using either link, ensure you are visiting hstar.com.au



National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

I have modeled the shading in accordance with NatHERS principles

Window and glazed door type and performance

Default* windows

| Window ID | Window Description | Maximum U-value* | SHGC* | Substitution tolerance ranges | |
|--------------|--|------------------|-------|-------------------------------|------------------|
| | | | | SHGC lower limit | SHGC upper limit |
| PVC-006-01 W | PVC-006-01 W uPVC B DG Argon Fill Clear-Clear | 2.6 | 0.53 | 0.50 | 0.56 |
| PVC-005-01 W | PVC-005-01 W uPVC A DG Argon Fill Clear-Clear | 2.6 | 0.50 | 0.48 | 0.53 |

Custom* windows

| Window ID | Window Description | Maximum U-value* | SHGC* | Substitution tolerance ranges | |
|-------------------|--------------------|------------------|-------|-------------------------------|------------------|
| | | | | SHGC lower limit | SHGC upper limit |
| No Data Available | | | | | |

Window and glazed door *schedule*

| Location | Window ID | Window no. | Height (mm) | Width (mm) | Window type | Opening % | Orientation | Window shading device* |
|----------------|--------------|------------|-------------|------------|-------------|-----------|-------------|------------------------|
| Family | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| Family | PVC-005-01 W | n/a | 720 | 500 | n/a | 90 | NW | No |
| Family | PVC-005-01 W | n/a | 800 | 500 | n/a | 90 | NW | No |
| Family | PVC-006-01 W | n/a | 2400 | 3300 | n/a | 90 | NW | No |
| guest | PVC-005-01 W | n/a | 800 | 800 | n/a | 90 | SW | No |
| guest | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| guest | PVC-005-01 W | n/a | 720 | 500 | n/a | 90 | NW | No |
| guest | PVC-005-01 W | n/a | 800 | 500 | n/a | 90 | NW | No |
| guest | PVC-006-01 W | n/a | 2400 | 3300 | n/a | 90 | NW | No |
| ens | PVC-005-01 W | n/a | 800 | 800 | n/a | 90 | SW | No |
| Bedroom 1 | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| Bedroom 1 | PVC-005-01 W | n/a | 720 | 500 | n/a | 10 | NW | No |
| Bedroom 1 | PVC-005-01 W | n/a | 800 | 500 | n/a | 10 | NW | No |
| Bedroom 1 | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| Bedroom 1 | PVC-005-01 W | n/a | 2400 | 600 | n/a | 10 | W | No |
| Bedroom 1 | PVC-006-01 W | n/a | 2400 | 3900 | n/a | 90 | NW | No |
| Bedroom | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| Bedroom | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| Bedroom | PVC-006-01 W | n/a | 800 | 1700 | n/a | 00 | SW | No |
| ens | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| bath | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| bath | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| bath | PVC-005-01 W | n/a | 720 | 500 | n/a | 10 | NW | No |
| bath | PVC-005-01 W | n/a | 800 | 500 | n/a | 10 | NW | No |
| bedroom 2 | PVC-006-01 W | n/a | 2400 | 2400 | n/a | 90 | W | No |
| Kitchen/Living | PVC-006-01 W | n/a | 800 | 4400 | n/a | 00 | NE | No |
| Kitchen/Living | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| Kitchen/Living | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| Kitchen/Living | PVC-006-01 W | n/a | 800 | 2000 | n/a | 00 | NE | No |

| Location | Window ID | Window no. | Height (mm) | Width (mm) | Window type | Opening % | Orientation | Window shading device* |
|----------------|--------------|------------|-------------|------------|-------------|-----------|-------------|------------------------|
| Kitchen/Living | PVC-006-01 W | n/a | 800 | 1700 | n/a | 00 | SW | No |
| Kitchen/Living | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 800 | 4400 | n/a | 00 | SW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| Kitchen/Living | PVC-005-01 W | n/a | 800 | 500 | n/a | 10 | NW | No |
| Kitchen/Living | PVC-005-01 W | n/a | 720 | 500 | n/a | 10 | NW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 1000 | 3460 | n/a | 00 | NW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 1000 | 3460 | n/a | 00 | NW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 2400 | 7200 | n/a | 90 | NW | No |
| Kitchen/Living | PVC-006-01 W | n/a | 720 | 500 | n/a | 00 | NW | No |
| Kitchen/Living | PVC-005-01 W | n/a | 800 | 500 | n/a | 10 | NW | No |
| Kitchen/Living | PVC-005-01 W | n/a | 720 | 500 | n/a | 10 | NW | No |
| corridor | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| work shop | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| work shop | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | SW | No |
| work shop | PVC-006-01 W | n/a | 1000 | 1800 | n/a | 00 | NW | No |
| foyer | PVC-005-01 W | n/a | 800 | 800 | n/a | 10 | NE | No |
| foyer | PVC-006-01 W | n/a | 800 | 2000 | n/a | 00 | NE | No |
| foyer | PVC-006-01 W | n/a | 1000 | 1800 | n/a | 00 | NW | No |
| media | PVC-005-01 W | n/a | 800 | 1600 | n/a | 90 | SW | No |

Roof window type and performance

Default* roof windows

| Window ID | Window Description | Maximum U-value* | SHGC* | Substitution tolerance ranges | |
|-------------------|--------------------|------------------|-------|-------------------------------|------------------|
| | | | | SHGC lower limit | SHGC upper limit |
| No Data Available | | | | | |

Custom* roof windows

| Window ID | Window Description | Maximum U-value* | SHGC* | Substitution tolerance ranges | |
|-------------------|--------------------|------------------|-------|-------------------------------|------------------|
| | | | | SHGC lower limit | SHGC upper limit |
| No Data Available | | | | | |

Roof window schedule

| Location | Window ID | Window no. | Opening % | Height (mm) | Width (mm) | Orientation | Outdoor shade | Indoor shade |
|-------------------|-----------|------------|-----------|-------------|------------|-------------|---------------|--------------|
| No Data Available | | | | | | | | |

Skylight type and performance

| Skylight ID | Skylight description |
|-------------------|----------------------|
| No Data Available | |

Skylight schedule

| Location | Skylight ID | Skylight No. | Skylight shaft length (mm) | Area (m ²) | Orientation | Outdoor shade | Diffuser | Skylight shaft reflectance |
|-------------------|-------------|--------------|----------------------------|------------------------|-------------|---------------|----------|----------------------------|
| No Data Available | | | | | | | | |

External door schedule

| Location | Height (mm) | Width (mm) | Opening % | Orientation |
|-----------|-------------|------------|-----------|-------------|
| pantry | 2100 | 800 | 90 | SE |
| work shop | 2100 | 1250 | 90 | SE |
| foyer | 2400 | 1100 | 90 | NE |

External wall type

| Wall ID | Wall type | Solar absorptance | Wall shade (colour) | Bulk insulation (R-value) | Reflective wall wrap* |
|---------|--------------------------------------|-------------------|---------------------|---------------------------|-----------------------|
| EW-1 | Tilt up concrete, lined | 0.50 | Medium | Bulk Insulation R3.5 | No |
| EW-2 | Tilt up concrete, lined | 0.50 | Medium | Bulk Insulation R3.5 | No |
| EW-3 | Weatherboard Cavity Panel Direct Fix | 0.50 | Medium | Bulk Insulation R3.5 | No |
| EW-4 | Weatherboard Cavity Panel Direct Fix | 0.50 | Medium | Bulk Insulation R3.5 | No |

External wall schedule

| Location | Wall ID | Height (mm) | Width (mm) | Orientation | Horizontal shading feature* maximum projection (mm) | Vertical shading feature (yes/no) |
|-----------|---------|-------------|------------|-------------|---|-----------------------------------|
| Family | EW-1 | 2730 | 900 | NE | 1000 | YES |
| Family | EW-1 | 2730 | 900 | NW | 900 | YES |
| Family | EW-2 | 2730 | 5795 | NE | 100 | NO |
| Family | EW-1 | 2730 | 3495 | NW | 4150 | NO |
| guest | EW-2 | 2730 | 2995 | SW | 100 | NO |
| guest | EW-1 | 2730 | 1000 | NW | 900 | YES |
| guest | EW-1 | 2730 | 1000 | SW | 1100 | YES |
| guest | EW-1 | 2730 | 3595 | NW | 4200 | NO |
| ens | EW-1 | 2730 | 2690 | SW | 100 | NO |
| staircase | EW-1 | 2730 | 600 | NE | 2200 | YES |
| staircase | EW-1 | 2730 | 2300 | SE | 425 | NO |
| staircase | EW-1 | 2730 | 600 | SW | 4700 | YES |
| Bedroom 1 | EW-3 | 2730 | 2900 | NE | 100 | YES |
| Bedroom 1 | EW-3 | 2730 | 900 | NW | 1000 | YES |
| Bedroom 1 | EW-3 | 2730 | 995 | NE | 200 | NO |
| Bedroom 1 | EW-3 | 2730 | 716 | W | 1082 | YES |
| Bedroom 1 | EW-3 | 2730 | 4168 | NW | 1076 | NO |
| Bedroom | EW-1 | 2730 | 3495 | SE | 2075 | NO |
| Bedroom | EW-3 | 2730 | 5395 | SW | 50 | NO |
| ens | EW-3 | 2730 | 7895 | NE | 200 | NO |
| ens | EW-1 | 2730 | 2095 | SE | 2000 | YES |
| wc | EW-3 | 2730 | 1290 | SW | 25 | NO |
| bath | EW-3 | 2730 | 2195 | SW | 25 | NO |
| bath | EW-3 | 2730 | 900 | NW | 900 | YES |
| bedroom 2 | EW-3 | 2730 | 2795 | SW | 100 | YES |
| bedroom 2 | EW-3 | 2730 | 3494 | W | 1132 | YES |
| store | EW-1 | 2730 | 1090 | SE | 2050 | YES |
| corridor | EW-1 | 2730 | 600 | NE | 2300 | YES |
| corridor | EW-1 | 2730 | 2300 | SE | 1425 | NO |

| Location | Wall ID | Height (mm) | Width (mm) | Orientation | Horizontal shading feature* maximum projection (mm) | Vertical shading feature (yes/no) |
|----------------|---------|-------------|------------|-------------|---|-----------------------------------|
| corridor | EW-1 | 2730 | 600 | SW | 4675 | YES |
| Kitchen/Living | EW-4 | 3950 | 5000 | NE | 600 | NO |
| Kitchen/Living | EW-4 | 2790 | 4300 | NE | 600 | NO |
| Kitchen/Living | EW-3 | 2790 | 600 | SE | 7500 | YES |
| Kitchen/Living | EW-3 | 2790 | 3795 | SW | 100 | NO |
| Kitchen/Living | EW-4 | 3950 | 5100 | SW | 100 | NO |
| Kitchen/Living | EW-4 | 3950 | 900 | NW | 3825 | YES |
| Kitchen/Living | EW-4 | 3950 | 1000 | SW | 1000 | YES |
| Kitchen/Living | EW-4 | 3950 | 7200 | NW | 4000 | NO |
| Kitchen/Living | EW-4 | 3950 | 1000 | NE | 1000 | YES |
| Kitchen/Living | EW-4 | 3950 | 900 | NW | 3825 | YES |
| pantry | EW-3 | 2790 | 1800 | SE | 100 | NO |
| pantry | EW-3 | 2790 | 1995 | SW | 100 | NO |
| corridor | EW-3 | 2790 | 1595 | NE | 800 | YES |
| work shop | EW-3 | 3250 | 2895 | SE | 6100 | NO |
| work shop | EW-3 | 3250 | 5700 | SW | 100 | NO |
| work shop | EW-3 | 1600 | 2895 | NW | 600 | NO |
| foyer | EW-3 | 3250 | 5700 | NE | 600 | NO |
| foyer | EW-3 | 3250 | 2095 | SE | 6100 | NO |
| foyer | EW-3 | 1600 | 2095 | NW | 600 | NO |
| store | EW-1 | 2730 | 3095 | NE | 100 | NO |
| store | EW-1 | 2730 | 2095 | SE | 1000 | YES |
| media | EW-1 | 2730 | 4595 | SE | 1075 | YES |
| media | EW-1 | 2730 | 3095 | SW | 100 | NO |

Internal wall type

| Wall ID | Wall type | Area (m ²) | Bulk insulation |
|---------|--|------------------------|----------------------------------|
| IW-1 | Cavity wall, direct fix plasterboard, single gap | 246.00 | Bulk Insulation, No Air Gap R2.7 |
| IW-2 | Concrete Panel/Blocks fully core filled | 18.00 | No Insulation |

Floor type

| Location | Construction | Area (m ²) | Sub-floor ventilation | Added insulation (R-value) | Covering |
|------------------|--------------------------------|------------------------|-----------------------|--|-----------------------------|
| Family | Concrete Slab on Ground 200mm | 28.20 | None | No Insulation | Ceramic Tiles 8mm |
| guest | Concrete Slab on Ground 200mm | 17.00 | None | No Insulation | Carpet 10mm |
| ldry | Concrete Slab on Ground 200mm | 5.20 | None | No Insulation | Ceramic Tiles 8mm |
| ens | Concrete Slab on Ground 200mm | 6.40 | None | No Insulation | Ceramic Tiles 8mm |
| staircase | Concrete Slab on Ground 200mm | 8.10 | None | No Insulation | Cork Tiles or Parquetry 8mm |
| Bedroom 1/Family | Timber Above Plasterboard 19mm | 7.90 | | No Insulation | Carpet 10mm |
| Bedroom 1/guest | Timber Above Plasterboard 19mm | 2.10 | | No Insulation | Carpet 10mm |
| Bedroom 1 | Suspended Timber Floor 19mm | 13.00 | Totally Open | Bulk Insulation in Contact with Floor R3 | Carpet 10mm |
| Bedroom /ldry | Timber Above Plasterboard 19mm | 2.00 | | No Insulation | Carpet 10mm |
| Bedroom /ens | Timber Above Plasterboard 19mm | 5.60 | | No Insulation | Carpet 10mm |
| Bedroom /media | Timber Above Plasterboard 19mm | 10.60 | | No Insulation | Carpet 10mm |
| ens/Family | Timber Above Plasterboard 19mm | 16.70 | | No Insulation | Ceramic Tiles 8mm |
| ens/store | Timber Above Plasterboard 19mm | 6.40 | | No Insulation | Ceramic Tiles 8mm |
| wc/guest | Timber Above Plasterboard 19mm | 1.60 | | No Insulation | Ceramic Tiles 8mm |
| wc/ens | Timber Above Plasterboard 19mm | 0.70 | | No Insulation | Ceramic Tiles 8mm |
| bath/guest | Timber Above Plasterboard 19mm | 5.80 | | No Insulation | Ceramic Tiles 8mm |
| bedroom 2/guest | Timber Above Plasterboard 19mm | 2.50 | | No Insulation | Cork Tiles or Parquetry 8mm |
| bedroom 2 | Suspended Timber Floor 19mm | 8.20 | Totally Open | Bulk Insulation in Contact with Floor R3 | Cork Tiles or Parquetry 8mm |
| store/media | Timber Above Plasterboard 19mm | 2.30 | | No Insulation | Cork Tiles or Parquetry 8mm |
| corridor/Family | Timber Above Plasterboard 19mm | 3.20 | | No Insulation | Cork Tiles or Parquetry 8mm |
| corridor/guest | Timber Above Plasterboard 19mm | 4.50 | | No Insulation | Cork Tiles or Parquetry 8mm |
| corridor/ldry | Timber Above Plasterboard 19mm | 3.50 | | No Insulation | Cork Tiles or Parquetry 8mm |

| Location | Construction | Area Sub-floor (m ²) | ventilation | Added insulation (R-value) | Covering |
|------------------------------|-----------------------------------|-------------------------------------|-----------------|---|--------------------------------|
| corridor/staircase | Timber Above Plasterboard 19mm | 8.10 | | No Insulation | Cork Tiles or Parquetry 8mm |
| corridor/media | Timber Above Plasterboard 19mm | 0.80 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /Bedroom 1 | Timber Above Plasterboard 19mm | 10.70 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /Bedroom | Timber Above Plasterboard 19mm | 18.50 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /ens | Timber Above Plasterboard 19mm | 23.60 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /wc | Timber Above Plasterboard 19mm | 2.60 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /bath | Timber Above Plasterboard 19mm | 6.10 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /bedroom 2 | Timber Above Plasterboard 19mm | 3.00 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /store | Timber Above Plasterboard 19mm | 2.50 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living /corridor | Timber Above Plasterboard 19mm | 20.80 | | No Insulation | Cork Tiles or Parquetry 8mm |
| Kitchen/Living | Suspended Timber Floor 19mm | 0.80 | Totally Open | Bulk Insulation in Contact with Floor R3 | Cork Tiles or Parquetry 8mm |
| pantry | Suspended Timber Floor 19mm | 8.90 | Totally Open | Bulk Insulation in Contact with Floor R3 | Cork Tiles or Parquetry 8mm |
| wc | Suspended Timber Floor 19mm | 3.30 | Open | Bulk Insulation in Contact with Floor R3 | Ceramic Tiles 8mm |
| corridor | Suspended Timber Floor 19mm | 1.90 | Open | Bulk Insulation in Contact with Floor R3 | Cork Tiles or Parquetry 8mm |
| work shop/Kitchen/Living | Timber Above Plasterboard 19mm | 10.60 | | No Insulation | Bare |
| work shop/pantry | Timber Above Plasterboard 19mm | 5.70 | | No Insulation | Bare |
| foyer/Kitchen/Living | Timber Above Plasterboard 19mm | 8.40 | | No Insulation | Ceramic Tiles 8mm |
| foyer/wc | Timber Above Plasterboard 19mm | 3.10 | | No Insulation | Ceramic Tiles 8mm |
| store | Concrete Slab on Ground 19mm | 6.30 | None | No Insulation | Ceramic Tiles 8mm |
| media | Concrete Slab on Ground 200mm | 13.90 | None | No Insulation | Ceramic Tiles 8mm |

Ceiling type

| Location | Construction material/type | Bulk insulation R-value (may include edge batt values) | Reflective wrap* |
|----------------|----------------------------|---|------------------|
| Family | Plasterboard | Bulk Insulation R4 | No |
| Family | Timber Above Plasterboard | No Insulation | No |
| guest | Plasterboard | Bulk Insulation R4 | No |
| guest | Timber Above Plasterboard | No Insulation | No |
| Idry | Plasterboard | Bulk Insulation R4 | No |
| Idry | Timber Above Plasterboard | No Insulation | No |
| ens | Plasterboard | Bulk Insulation R4 | No |
| ens | Timber Above Plasterboard | No Insulation | No |
| staircase | Plasterboard | Bulk Insulation R4 | No |
| staircase | Timber Above Plasterboard | No Insulation | No |
| Bedroom 1 | Plasterboard | Bulk Insulation R6 | No |
| Bedroom 1 | Timber Above Plasterboard | No Insulation | No |
| Bedroom | Plasterboard | Bulk Insulation R4 | No |
| Bedroom | Timber Above Plasterboard | No Insulation | No |
| ens | Plasterboard | Bulk Insulation R4 | No |
| ens | Timber Above Plasterboard | No Insulation | No |
| wc | Plasterboard | Bulk Insulation R4 | No |
| wc | Timber Above Plasterboard | No Insulation | No |
| bath | Plasterboard | Bulk Insulation R4 | No |
| bath | Timber Above Plasterboard | No Insulation | No |
| bedroom 2 | Plasterboard | Bulk Insulation R6 | No |
| bedroom 2 | Timber Above Plasterboard | No Insulation | No |
| store | Plasterboard | Bulk Insulation R4 | No |
| store | Timber Above Plasterboard | No Insulation | No |
| corridor | Plasterboard | Bulk Insulation R4 | No |
| corridor | Timber Above Plasterboard | No Insulation | No |
| Kitchen/Living | Plasterboard | Bulk Insulation R6 | No |
| Kitchen/Living | Timber Above Plasterboard | No Insulation | No |
| pantry | Plasterboard | Bulk Insulation R6 | No |

| Location | Construction material/type | Bulk insulation R-value (may include edge batt values) | Reflective wrap* |
|-----------|----------------------------|---|------------------|
| pantry | Timber Above Plasterboard | No Insulation | No |
| wc | Plasterboard | Bulk Insulation R6 | No |
| wc | Timber Above Plasterboard | No Insulation | No |
| corridor | Plasterboard | Bulk Insulation R6 | No |
| work shop | Plasterboard | Bulk Insulation R6 | No |
| foyer | Plasterboard | Bulk Insulation R6 | No |
| store | Plasterboard | Bulk Insulation R4 | No |
| store | Timber Above Plasterboard | No Insulation | No |
| media | Plasterboard | Bulk Insulation R4 | No |
| media | Timber Above Plasterboard | No Insulation | No |

Ceiling penetrations*

| Location | Quantity | Type | Diameter (mm) | Sealed/unsealed |
|----------------|----------|------------------|---------------|-----------------|
| Family | 6 | Downlights - LED | 90 | Sealed |
| guest | 4 | Downlights - LED | 90 | Sealed |
| ldry | 1 | Downlights - LED | 90 | Sealed |
| ldry | 1 | Exhaust Fans | 350 | Sealed |
| ens | 2 | Downlights - LED | 90 | Sealed |
| ens | 1 | Exhaust Fans | 350 | Sealed |
| Bedroom 1 | 5 | Downlights - LED | 90 | Sealed |
| Bedroom | 4 | Downlights - LED | 90 | Sealed |
| ens | 5 | Downlights - LED | 90 | Sealed |
| ens | 1 | Exhaust Fans | 350 | Sealed |
| wc | 1 | Exhaust Fans | 350 | Sealed |
| bath | 2 | Downlights - LED | 90 | Sealed |
| bath | 1 | Exhaust Fans | 350 | Sealed |
| bedroom 2 | 2 | Downlights - LED | 90 | Sealed |
| corridor | 4 | Downlights - LED | 90 | Sealed |
| Kitchen/Living | 18 | Downlights - LED | 90 | Sealed |

| Location | Quantity | Type | Diameter (mm) | Sealed/unsealed |
|----------------|----------|------------------|---------------|-----------------|
| Kitchen/Living | 1 | Exhaust Fans | 350 | Sealed |
| pantry | 2 | Downlights - LED | 90 | Sealed |
| wc | 1 | Downlights - LED | 90 | Sealed |
| wc | 1 | Exhaust Fans | 350 | Sealed |
| work shop | 4 | Downlights - LED | 90 | Sealed |
| foyer | 2 | Downlights - LED | 90 | Sealed |
| store | 2 | Downlights - LED | 90 | Sealed |
| media | 2 | Downlights - LED | 90 | Sealed |

Ceiling fans

| Location | Quantity | Diameter (mm) |
|----------------|----------|---------------|
| Family | 1 | 1200 |
| guest | 1 | 1200 |
| Bedroom 1 | 1 | 1200 |
| Bedroom | 1 | 1200 |
| bedroom 2 | 1 | 1200 |
| Kitchen/Living | 2 | 1200 |
| media | 1 | 1200 |

Roof type

| Construction | Added insulation (R-value) | Solar absorptance | Roof shade |
|------------------------|--|-------------------|------------|
| Waterproofing Membrane | No Insulation, Only an Air Gap | 0.50 | Medium |
| Corrugated Iron | Bulk, Reflective Side Down, Anti-glare Up R1.3 | 0.50 | Medium |

Explanatory notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

| | |
|---|--|
| Annual energy load | the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions. |
| Assessed floor area | the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents. |
| Ceiling penetrations | features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts. |
| Conditioned | a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages. |
| Custom windows | windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating. |
| Default windows | windows that are representative of a specific type of window product and whose properties have been derived by statistical methods. |
| Entrance door | these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building. |
| Exposure category – exposed | terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors). |
| Exposure category – open | terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors). |
| Exposure category – suburban | terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas. |
| Exposure category – protected | terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas. |
| Horizontal shading feature | provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels. |
| National Construction Code (NCC) Class | the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au . |
| Opening percentage | the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations. |
| Provisional value | an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au |
| Reflective wrap (also known as foil) | can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties. |
| Roof window | for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser. |
| Shading device | a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves. |
| Shading features | includes neighbouring buildings, fences, and wing walls, but excludes eaves. |
| Solar heat gain coefficient (SHGC) | the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits. |
| Skylight (also known as roof lights) | for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level. |
| U-value | the rate of heat transfer through a window. The lower the U-value, the better the insulating ability. |
| Unconditioned | a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions. |
| Vertical shading features | provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees). |

Assessor Construction Summary

Project:

Address:

Applicant:

190 McCarrs Creek Road Church Point NSW

Adam and Katrina Bacon

Contact:

Name:

Contact:

Peter Downes

peter@peterdownes.com.au

Assessor:

Name:

Address:

Contact:

Ailin Zhang

PO Box 5080, Sth Turramurra, 2074

0412-988088

Company:

Number:

Email:

Victor Lin & Associates

DMN/19/1894

Ailin@linassociates.com.au

| | | | | | | | | |
|--|------------------------|--|---------------------|---|------|--|---------------------------------|----------------------|
| Ext. Walls: | Construction | Insulation | Colour | Details | | | | |
| | Weatherboard Cavity | R3.5 | Med | As per plans | | | | |
| | Lined Concrete | R3.5 | | Level 1 | | | | |
| Int. Walls: | Construction | | | Details | | | | |
| | Plasterboard | R2.7 | | All internal walls | | | | |
| Floors: | Construction | Insulation | | Details | | | | |
| | Concrete slab | None | | As per plans | | | | |
| | Timber | None | | As per plans | | | | |
| | | R3.0 | | Under all suspended timber floor to external air (level 2,3) | | | | |
| Floor Cover: | Material | | | Details | | | | |
| | Timber/Tile/Carpet | | | As per plans | | | | |
| Ceilings: | Construction | Insulation | | Details | | | | |
| | Plasterboard | R6.0 | | Under all roofs and in ceilings with deck above | | | | |
| Roof: | Construction | Insulation | Colour | Details | | | | |
| | Metal | R1.3 60mm Anticon | Med | As per plans | | | | |
| Windows: | Product ID | Uw/SHGCw | Frame | Window No. | | | | |
| | Generic | 2.60 / 0.53 | Double Argon filled | PVC | | | | |
| | | 2.60 / 0.50 | | All fixed & sliding windows and stacker doors | | | | |
| Skylights: | Product ID | Glass | Frame | Uw/SHGCw | | | | |
| | n/a | | | All tilt & turn windows | | | | |
| Other: | Orientation | Terrain | Weatherseals | Climate Zone | | | | |
| | 25 | Suburban | Yes | 56 | | | | |
| Overshadowing Details: | Other Project Building | | | | | | | |
| Assessment: | Drawings: | 190 McCarrs Creek Road Church Point. Dwgs as stamped | | | | | | |
| | File Ref: | 4326A.02 | | | | | | |
| | Software: | BERS Pro 4.4 | | | | | | |
| Certification Number: | 0011961745 | | | Date: 04-June-2025 | | | | |
| Insulation Summary (refer also to table above) | | | | | | | | |
| House No. | Conditioned Area | Unconditioned Area | Heating | Cooling | Star | | SEALED Recessed Downlights ONLY | Sealed exhaust vents |
| House | 297 | 6 | 35.5 | 15.3 | | | X | X |

0011961745 03 Jun 2025

Assessor: Ailin Zhang

Accreditation No. DMN/19/1894

Address

Unit House, 190 McCarrs Creek Road, Church Point, NSW, 2105

hstar.com.au

House No.

Conditioned Area

Unconditioned Area

Heating

Cooling

Star

SEALED Recessed Downlights ONLY

Sealed exhaust vents

House

297

6

35.5

15.3

X

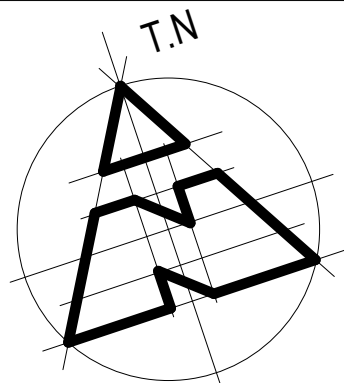
X

Disclaimer: By using this summary you are accepting all the terms of this disclaimer notice. While every effort is made to ensure that the content of this summary is accurate, the summary is provided "as is" and Victor Lin & Associates Pty Ltd, makes no representations or warranties in relation to the accuracy or completeness of the information found on it. In no event will Victor Lin & Associates Pty Ltd, be liable for any damages whatsoever for any differences between this summary and the NatHERS Universal Certificates that relate to this project. You accept that it is your responsibility to check the Universal Certificates and comply with any differences that may exist on those certificates.

drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

4.55 MK 2 ISSUE

| | | | | | |
|---|---|---|--|-------------|------------------|
| REVISION REV K 02.04.25 WINDOW/S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT | peterdownes multi-award winner designs 77 Riviera Ave, Avalon Beach 2107 0488 662 445 www.peterdownes.com.au | PROJECT new dwelling at 190 McCarrs Creek rd Church Point | | DRAWN PD | CHECKED PD |
| | | DRAWING cover sheet | | SCALE | DATE 11.03.21 |
| | | | | DRG. A3 | 2012 00 K |



1 2 3 4 5
5135 10500 1500 6000 655

existing boatshed

approved new dwelling

existing carparking stucture with studio under

900 as built setback

1900 as built setback

LOT 8
DP 20097

relocate and modify existing stairs

approved new incline lift rail

existing stairs

existing driveway

waste management area to council guidelines



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

4.55 MK 2 ISSUE

REVISION

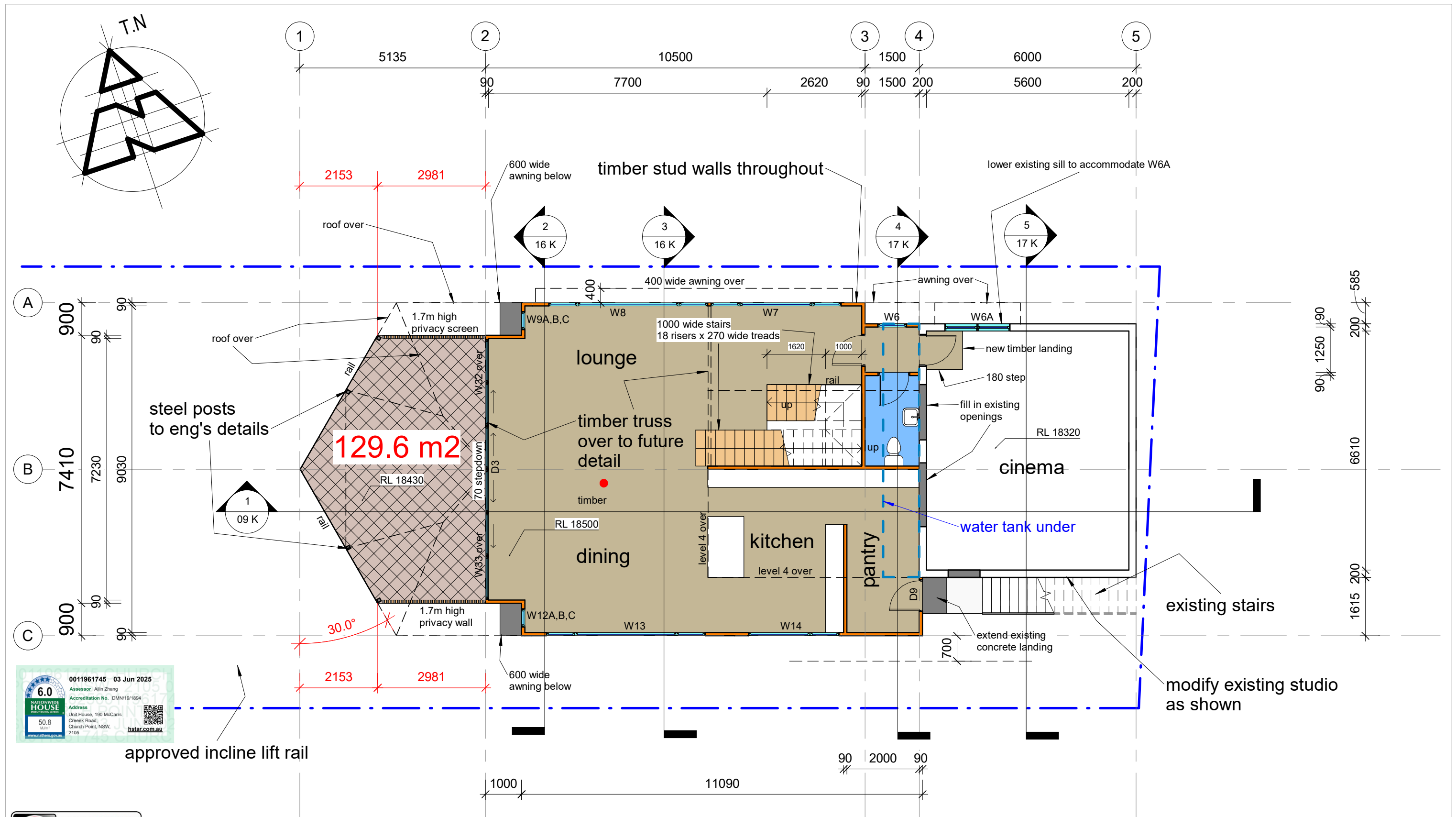
REV K 02.04.25
WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

PROJECT
new dwelling at 190 McCarrs Creek rd
Church Point
DRAWING
site plan

| | |
|----------------------|------------------|
| DRAWN PD | CHECKED CD |
| SCALE 1 : 200 | DATE 11.03.21 |
| DRG. A3 2012 01 K | |



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

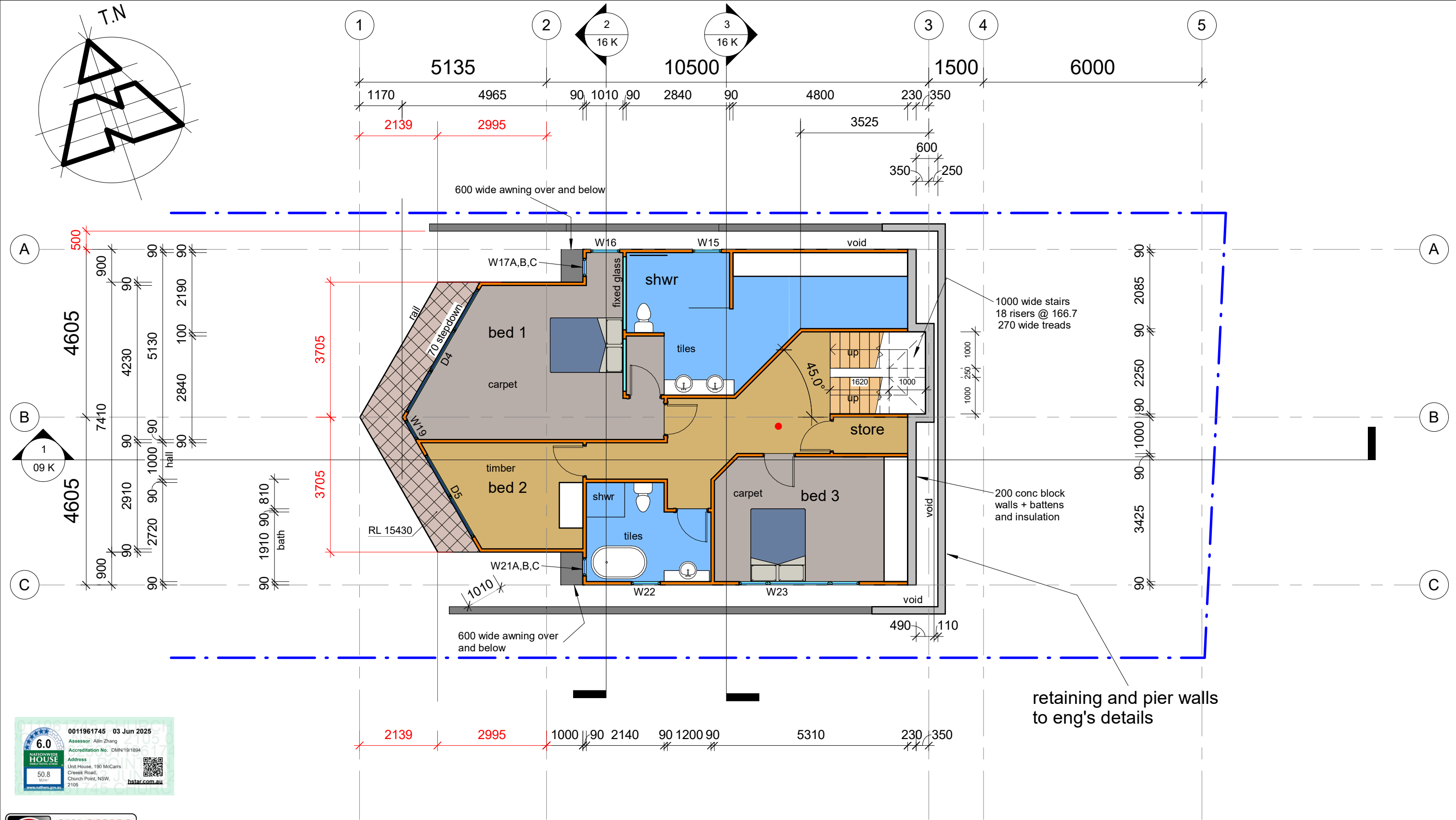
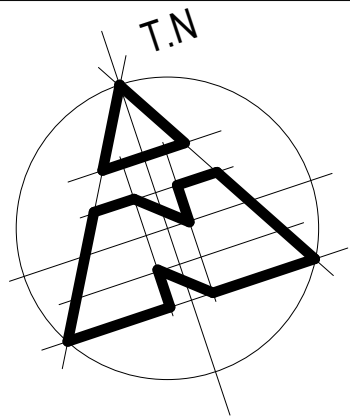
• smoke alarm complying with AS3786 installed to BCA Vol 2 Part 3.7.5 req's for NSW

4.55 MK 2 ISSUE

| REVISION | REV K 02 04.25 | PROJECT | new dwelling at 190 McCarrs Creek rd Church Point | | DRAWN | PD | CHECKED | PD |
|----------|---|---------|---|--|-------|---------|---------|----------|
| | WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT | DRAWING | level 3 | | SCALE | 1 : 100 | DATE | 11.03.21 |
| | | | | | DRG. | A3 | 2012 | 03 K |
| | | | | | | | | |



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

• smoke alarm complying with AS3786 installed to BCA Vol 2 Part 3.7.5 req's for NSW

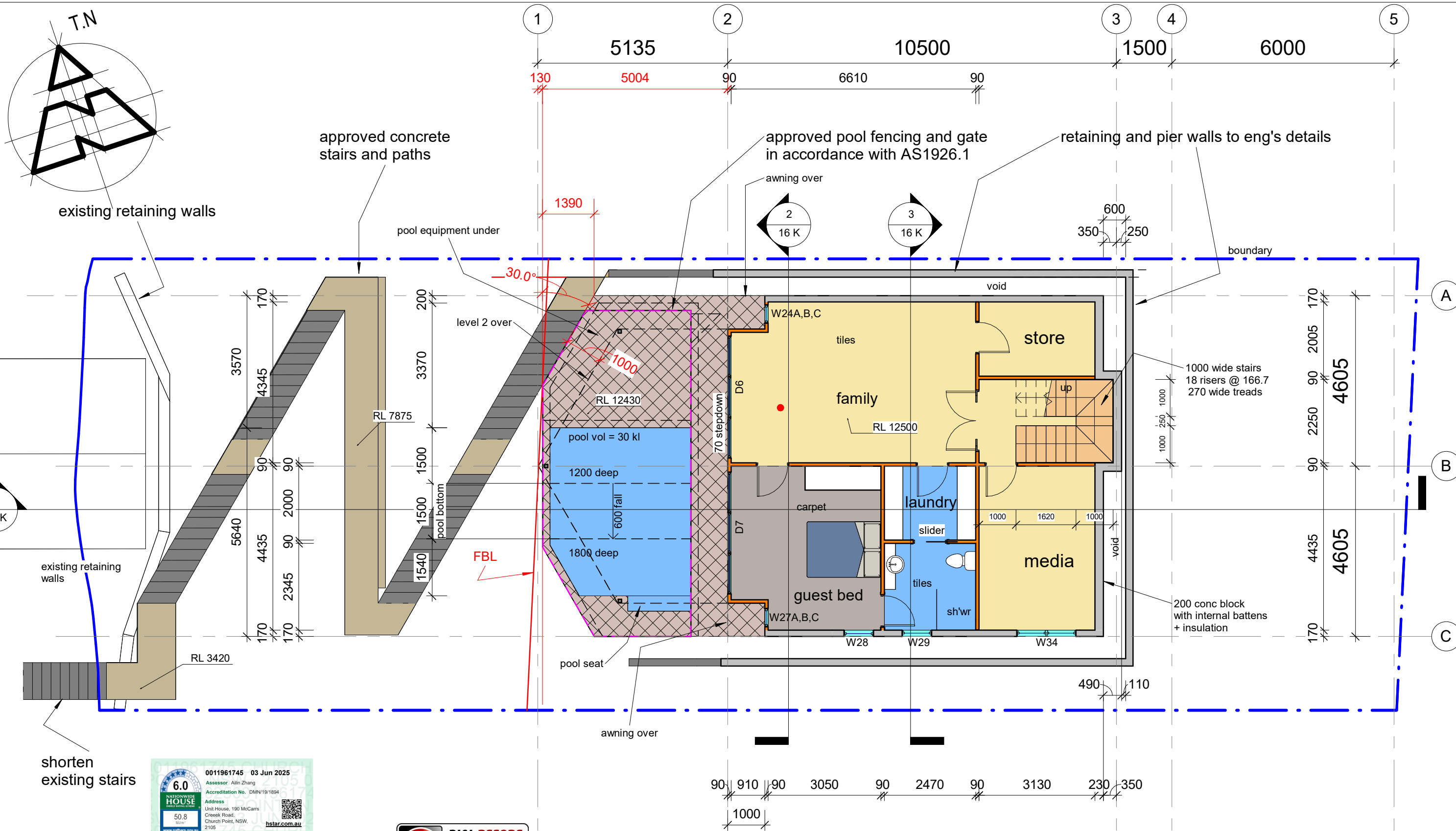
4.55 MK 2 ISSUE

| REVISION | |
|----------------|---|
| REV K 02.04.25 | WINDOW S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT |



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

| | | |
|---|----------------------|------------------|
| PROJECT new dwelling at 190 McCarrs Creek rd Church Point | DRAWN PD | CHECKED PD |
| | SCALE 1 : 100 | DATE 11.03.21 |
| | DWG. A3 2012 04 K | |



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion



● smoke alarm complying with AS3786 installed to BCA Vol 2 Part 3.7.5 req's for NSW

4.55 MK 2 ISSUE

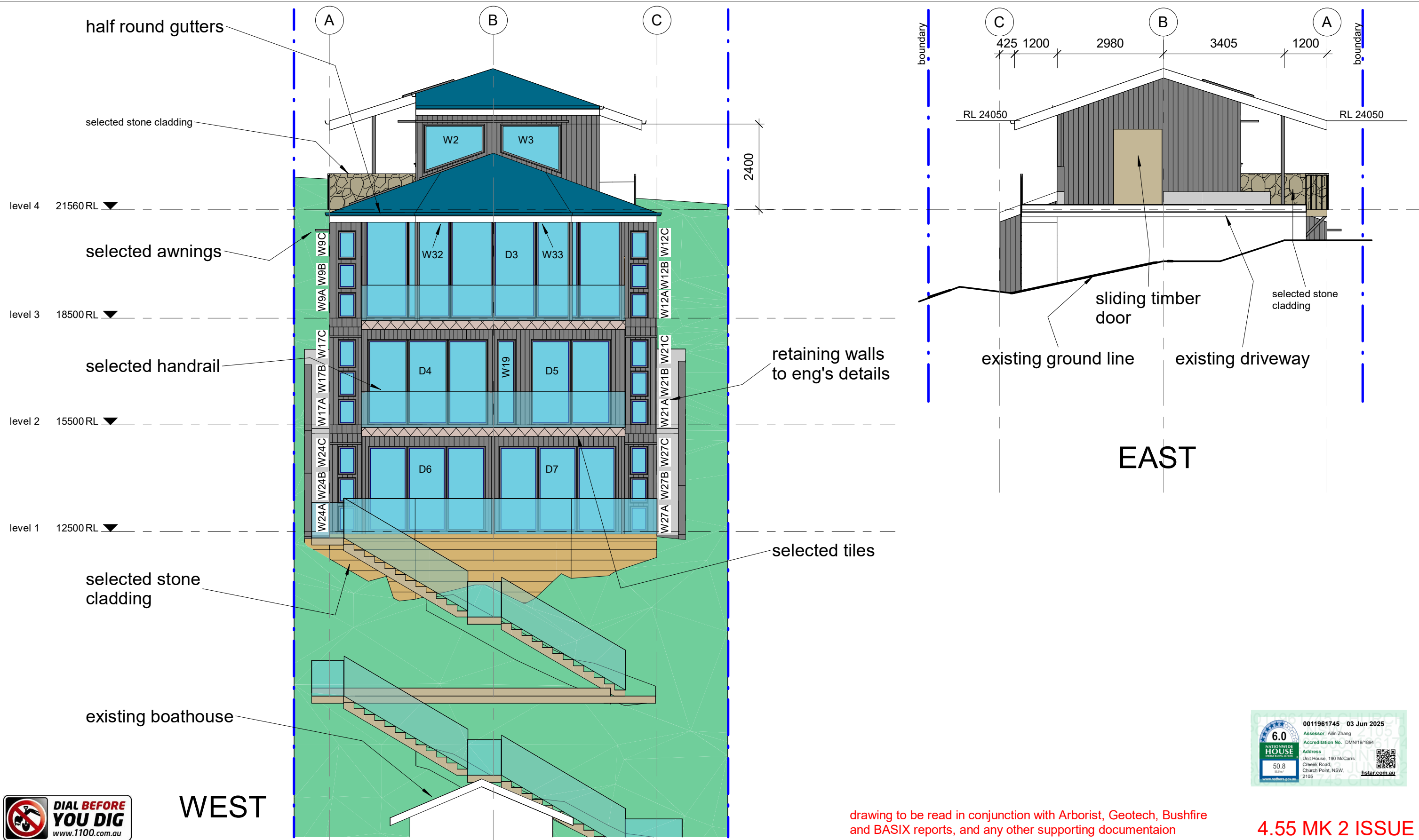
| REVISION | |
|----------------|---|
| REV K 02.04.25 | WINDOW S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT |



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

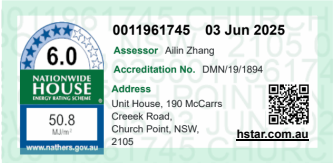
| | |
|---------|---|
| PROJECT | new dwelling at 190 McCarrs Creek rd Church Point |
| DRAWING | level 1 |

| | | | |
|-------|---------|---------|----------|
| DRAWN | PD | CHECKED | PD |
| SCALE | 1 : 100 | DATE | 11.03.21 |
| DRG. | A3 | 2012 | 05 K |



WEST

EAST



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

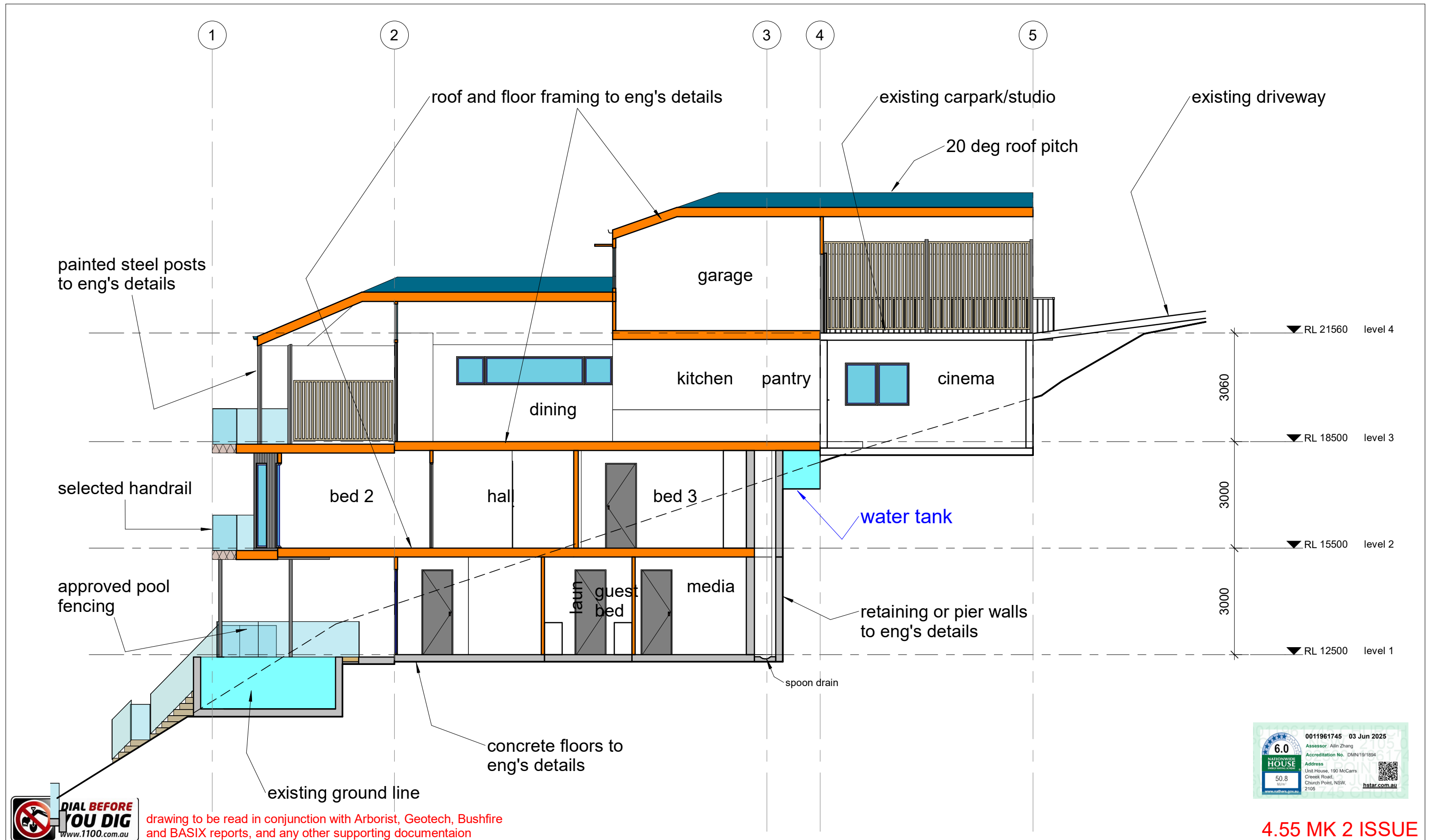
4.55 MK 2 ISSUE

REVISION

REV K 02.04.25
WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT

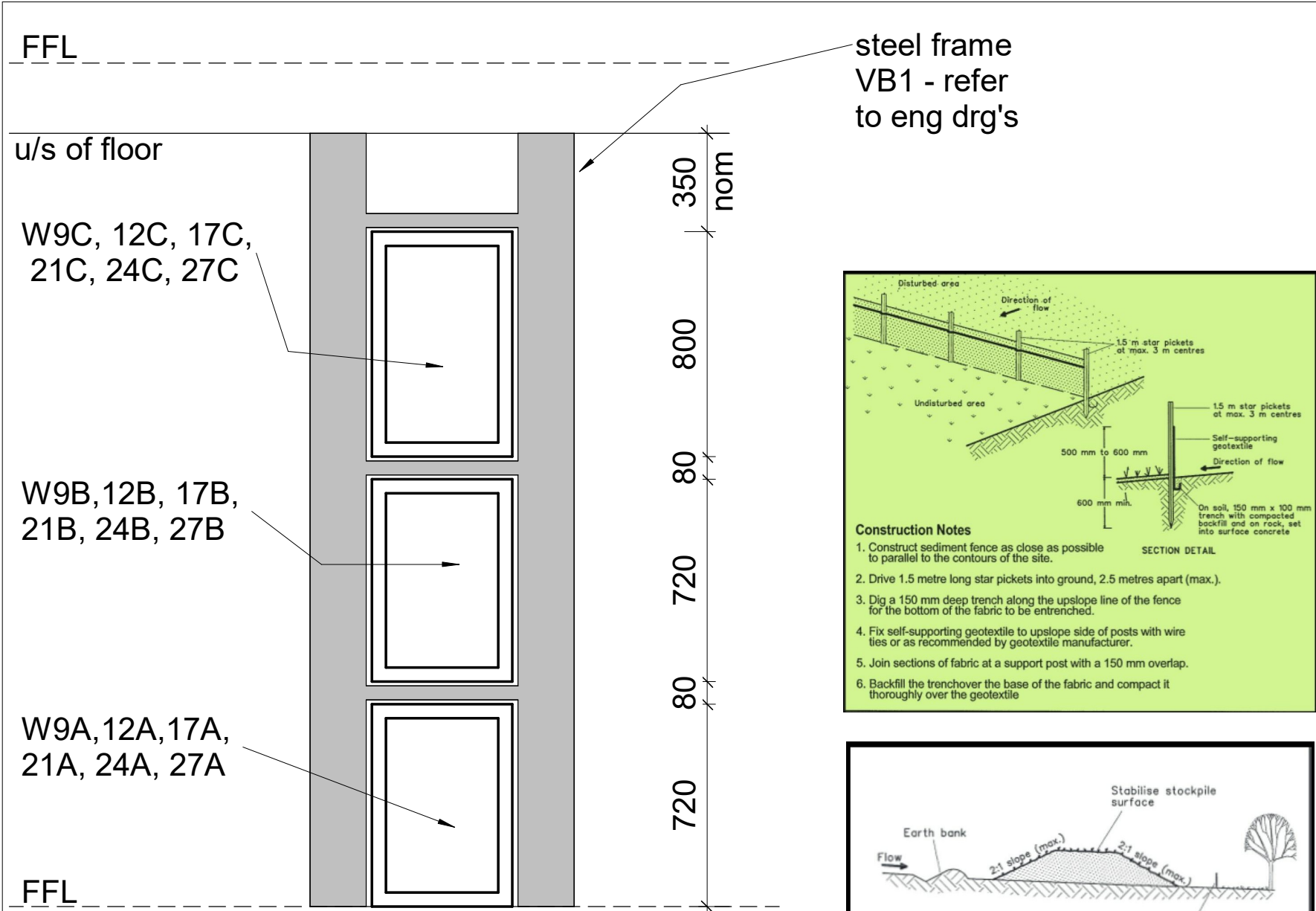
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

| | | |
|---|----------------------|------------------|
| PROJECT new dwelling at 190 McCarrs Creek rd Church Point | DRAWN PD | CHECKED PD |
| | SCALE 1 : 100 | DATE 11.03.21 |
| DRAWING east and west elevations | DRG. A3 2012 08 K | |



4.55 MK 2 ISSUE

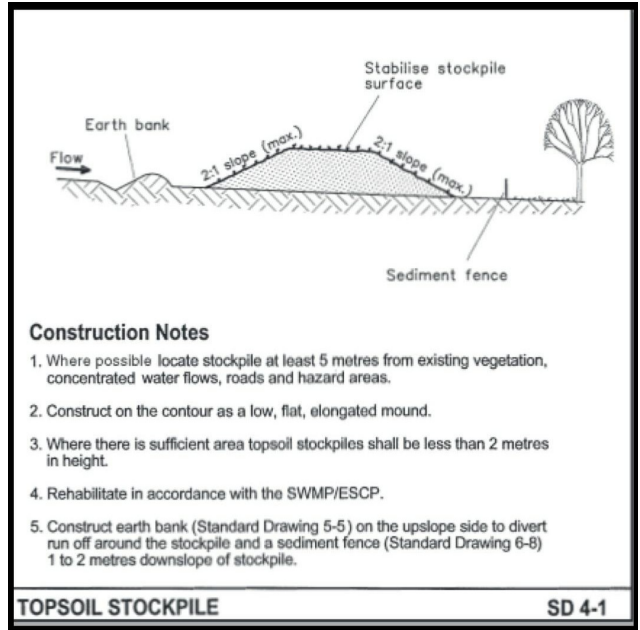
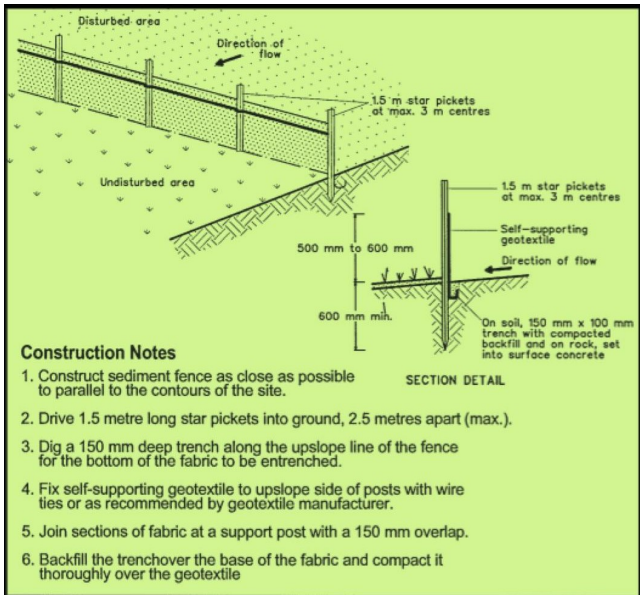
| | | | |
|--|---|--|--|
| <div> <div>REVISION</div> <div> <div>REV K 02.04.25</div> <div> <div>WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CARPORT</div> </div> </div> </div> | <div> <div> <div> <div>building designers australia nsw</div> <div> <div>peterdownes</div> <div>multi-award winner</div> <div>designs</div> </div> </div> <div> <div>77 Riviera Ave, Avalon Beach 2107</div> <div>0488 662 445</div> <div>www.peterdownes.com.au</div> </div> </div> </div> | <div> <div>PROJECT</div> <div>new dwelling at 190 McCarrs Creek rd Church Point</div> <div>DRAWING</div> <div>section 1</div> </div> | <div> <div> <div>DRAWN</div> <div>PD</div> <div>SCALE</div> <div>1 : 100</div> <div>DRG.</div> <div>A3</div> </div> <div> <div>CHECKED</div> <div>PD</div> <div>DATE</div> <div>11.03.21</div> <div>2012</div> <div>09 K</div> </div> </div> |
|--|---|--|--|



WINDOW BRACING FRAME ARRANGEMENT scale 1 to 20

ESTUARINE PLANNING LEVEL NOTES

All structural elements below 2.53 m AHD shall be of flood compatible materials.
All electrical equipment, wiring, fuel lines or any other service pipes and connections must be above 2.53 m AHD.
All power supplies (including electrical fittings, outlets and switches) must be above 2.53 m AHD.



BUILDING NOTES

All work to be carried out by suitably licensed and qualified tradesmen, and to comply with all relevant standards and Councils requirements.

Main contractor to be responsible for obtaining all necessary inspection certificates.

An approved sedimentation control system is to be installed and maintained for the duration of the construction.

Smoke alarms are to be fitted in accordance with Building Code of Australia requirements.

Termite protection is to be in the form of a physical barrier (eg Termimesh or similar) - no chemical barriers to be used.

DEMOLITION NOTES

existing house, garage, driveway, paths, retaining walls, external stairs etc to be demolished.

all demolition materials to be disposed of in an approved and proper manner

adjoining properties to be protected at all times

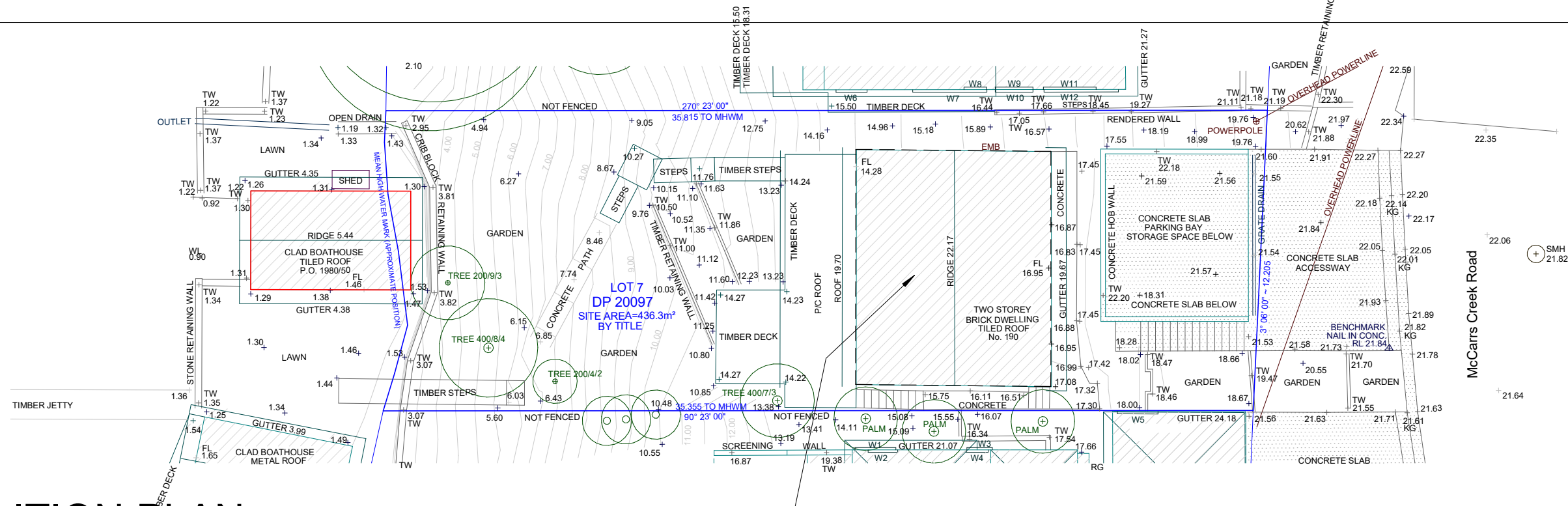
asbestos (if encountered) is to be disposed of in an approved and proper manner

EROSION AND SEDIMENT CONTROL PLAN

1. All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.
2. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.
3. Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.
4. Temporary sedimentation and erosion controls are to be constructed prior to commencement of any work to eliminate the discharge of sediment from the site.
5. Adequate measures shall be undertaken to remove clay from vehicles leaving the site so as to maintain public roads in a clean condition.
6. Builder to confirm the locations of barrier fences and stockpiles onsite, see suggested main barrier fence location on site plan.
7. Sediment fences and stockpiles to be constructed in accordance with modern standards and the diagrams seen to the left.
8. Due to the steeply sloping site, special care will be taken to prevent sediment runoff into existing drains or the waterway.
9. Note that due to the constraints of the site, barriers may need to be relocated during construction.
10. All ESCP measures are to be installed and managed in accordance with Landcom's Managing Urban Stormwater: *Soils and Construction* 2004.

4.55 MK 2 ISSUE

| | | | | | |
|----------|---|---|---|-----------------|------------------|
| REVISION | REV K 02.04.25 | peterdownes multi-award winner 77 Riviera Ave, Avalon Beach 2107 0488 662 445 www.peterdownes.com.au | PROJECT new dwelling at 190 McCarrs Creek rd Church Point | DRAWN PD | CHECKED PD |
| | WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT | | | SCALE 1 : 20 | DATE 11.03.21 |
| | | | | DRG. A3 | 2012 10 K |



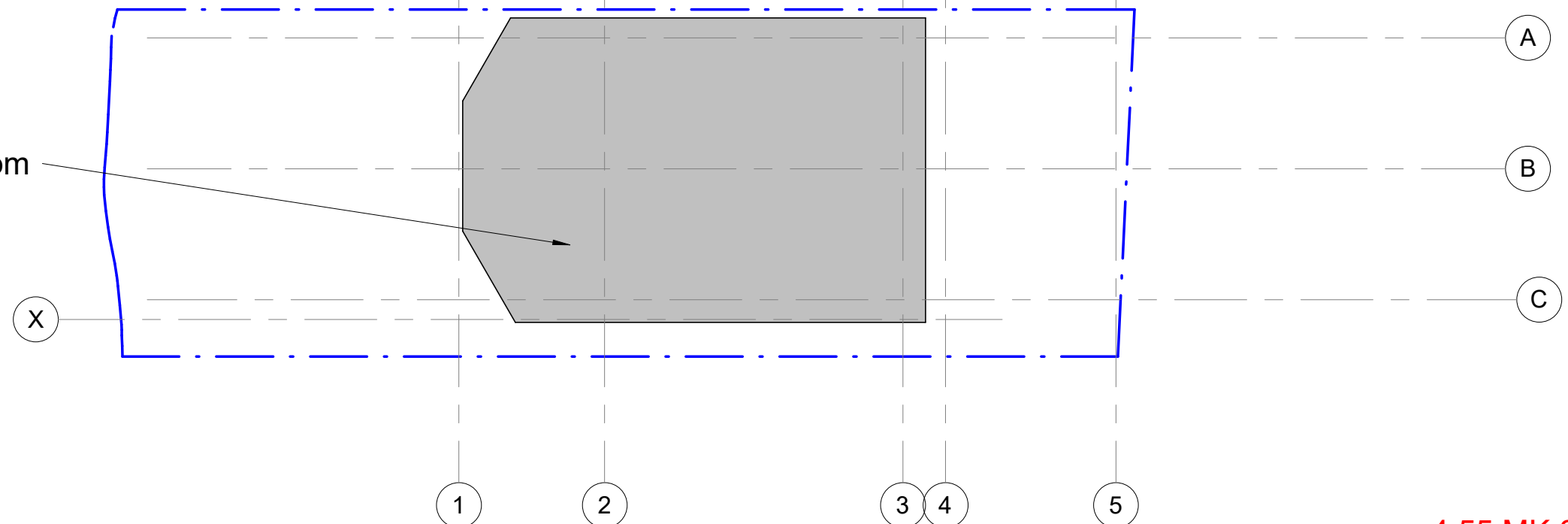
DEMOLITION PLAN

demolish existing dwelling, balconies, external paths

area to be excavated.
excavation depth varies from
zero to 4.0m



EXCAVATION PLAN



4.55 MK 2 ISSUE

REVISION

REV K 02.04.25
WINDOW'S W10A, 10B, 10C,
11A, 11B, 11C, 18A, 18B,
18C, 20A, 20B, 20C DELETED.
FOYER SKYLIGHT DELETED.
ENSUITE ALTERED.
W15 MOVED.
POOL SHORTENED.
VARIOUS WINDOWS
CHANGED FROM LOUVRE
TO TILT AND TURN.
GARAGE CHANGED TO
WORKSHOP AND DOOR
ALTERED.
DOOR ADDED BETWEEN
LAUNDRY AND LEVEL 2
BATHROOM.
NORTH AND SOUTH
SETBACKS ALTERED.
AWNING OVER W7 AND W8
REDUCED FROM 500 TO 400.
W8 WAS 1 LOUVRE AND 1
FIXED.
W13 WAS 2 LOUVRE AND 1
FIXED.
INCLINE LIFT AND
LANDINGS DELETED.
NEW WALKWAY ADDED TO
LEVEL 4.
CARPORT ROOF WIDENED.
AWNINGS OVER W6 AND 6A
DELETED.
WATER TANK RELOCATED.
PRIVACY SCREEN ADDED
TO CAPORT



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

PROJECT

new dwelling at 190 McCarrs Creek rd
Church Point

DRAWING

demolition and excavation plans

DRAWN

PD

SCALE

1 : 200

DRG.

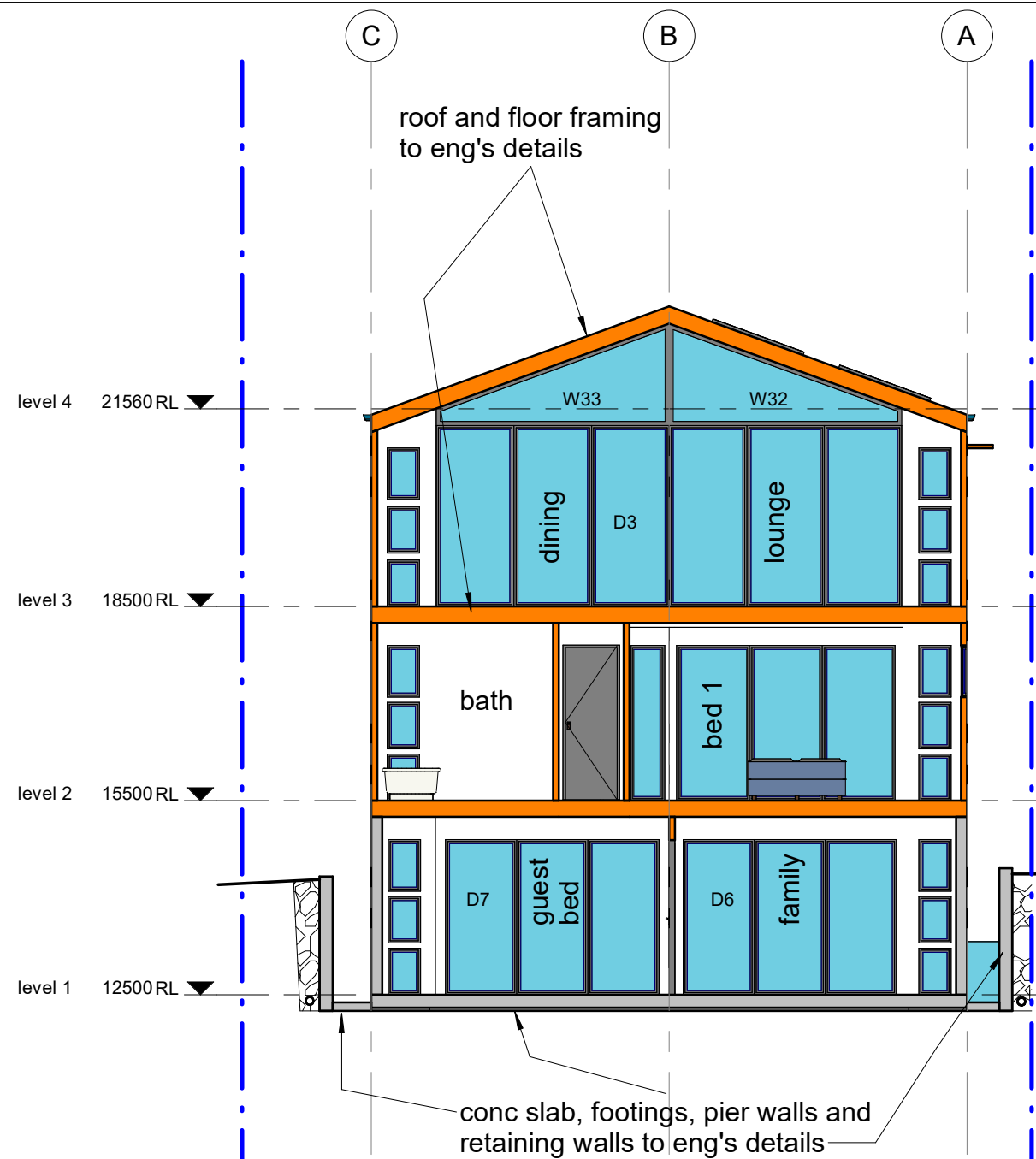
A3 2012 15 K

CHECKED

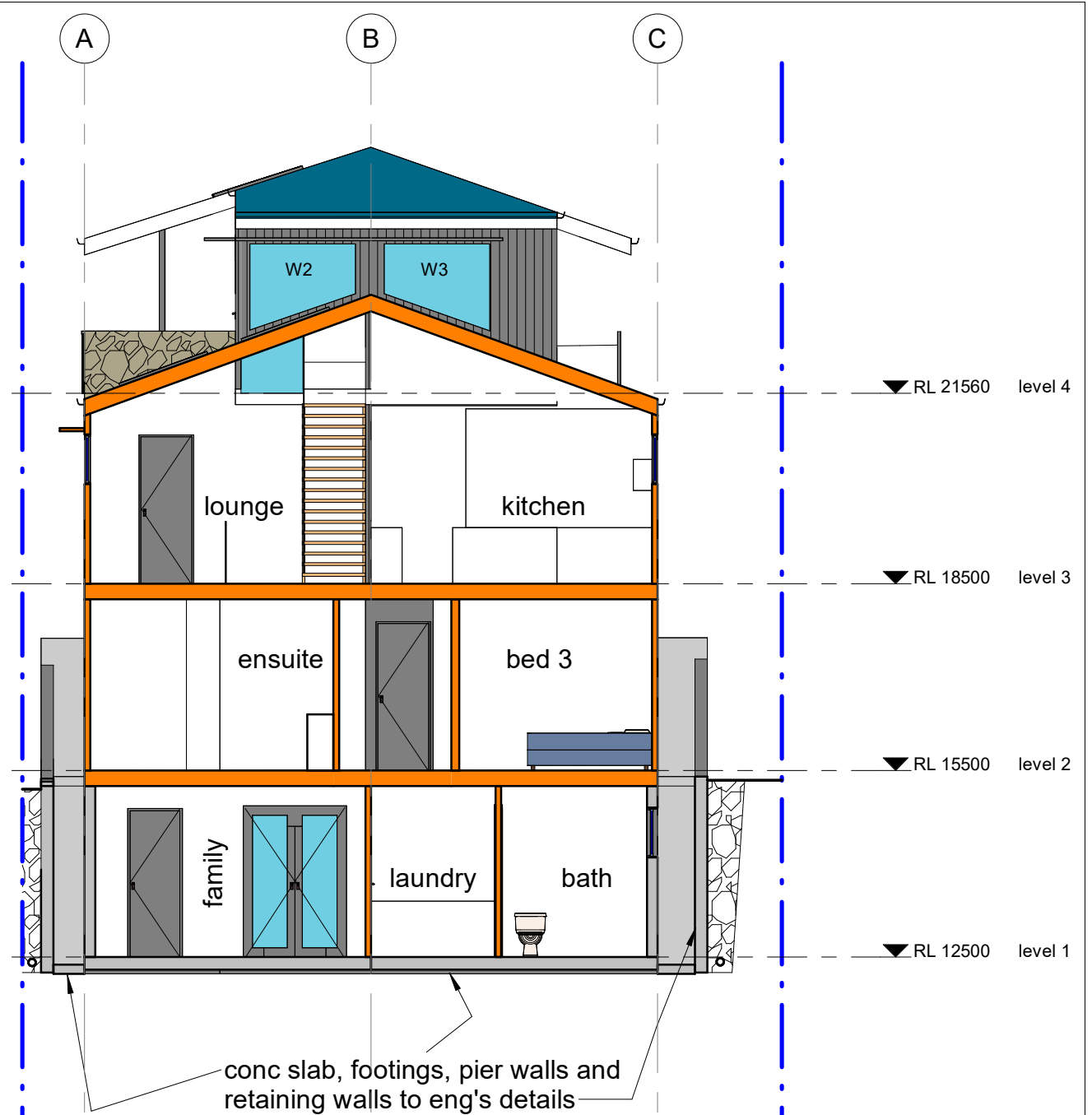
PD

DATE

03/19/21



SECTION 2



SECTION 3



drawing to be read in conjunction with Arborist, Geotech, Bushfire and BASIX reports, and any other supporting documentaion

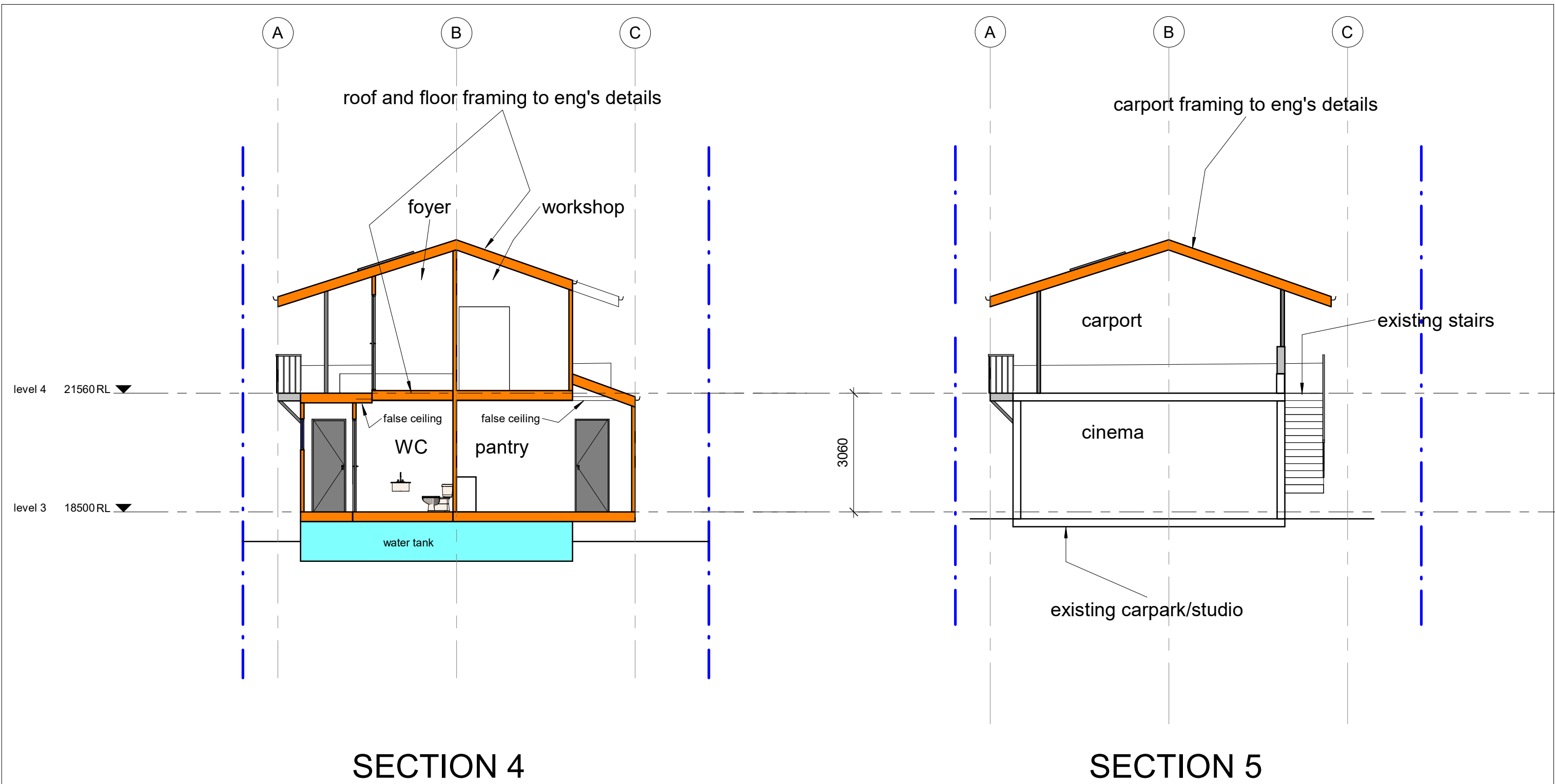
4.55 MK 2 ISSUE

| REVISION | |
|----------------|---|
| REV K 02.04.25 | WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT |



peterdownes
multi-award winner designs
77 Riviera Ave, Avalon Beach 2107 0488 662 445
www.peterdownes.com.au

| | | |
|---------|---|-----------|
| PROJECT | new dwelling at 190 McCarrs Creek rd Church Point | |
| DRAWING | sections 2 and 3 | |
| DRAWN | PD | CHECKED |
| SCALE | 1 : 100 | DATE |
| DRG. | A3 | 2012 16 K |



| | | | | | | | | | |
|----------|---|---|--|---|--|----------------------------|--|---------------|--|
| REVISION | <div>REV K 02.04.25 WINDOW S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CARPORT</div> <div><div>BDA</div><div>BUILDING DESIGNERS AUSTRALIA NSW</div></div> | peterdownes multi-award winner designs | | 77 Riviera Ave, Avalon Beach 2107 0488 662 445 | | www.peterdownes.com.au | | | |
| | | PROJECT new dwelling at 190 McCarrs Creek rd Church Point | | DRAWING sections 4 and 5 | | DRAWN PD | | CHECKED PD | |
| | | SCALE 1 : 100 | | DATE 07/05/21 | | DRG. A3 2012 17 K | | | |
| | | | | | | | | | |

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| Landscape | | | |
| The applicant must plant indigenous or low water use species of vegetation throughout 120 square metres of the site. | ✓ | ✓ | |
| Fixtures | | | |
| The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development. | | ✓ | ✓ |
| The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development. | | ✓ | ✓ |
| The applicant must install taps with a minimum rating of 4 star in the kitchen in the development. | | ✓ | |
| The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development. | | ✓ | |
| Alternative water | | | |
| Rainwater tank | | | |
| The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities. | ✓ | ✓ | ✓ |
| The applicant must configure the rainwater tank to collect rain runoff from at least 90 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). | | ✓ | ✓ |
| The applicant must connect the rainwater tank to: <ul style="list-style-type: none">the cold water tap that supplies each clothes washer in the developmentat least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) | | ✓ ✓ | ✓ ✓ |
| Swimming pool | | | |

| Thermal Comfort Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| Simulation Method | | | |
| The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development. | | | |
| The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol. | | | |
| The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate. | | | |
| The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications. | ✓ | ✓ | ✓ |
| The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications. | | ✓ | ✓ |
| The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate. | ✓ | ✓ | ✓ |
| The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below. | ✓ | ✓ | ✓ |

| Floor and wall construction | Area |
|---------------------------------------|--------------------|
| floor - concrete slab on ground | 66.0 square metres |
| floor - suspended floor/open subfloor | 32.0 square metres |

| Water Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|------------------------------|-----------------|
| The swimming pool must have a pool cover. | | ✓ | |
| The swimming pool must be shaded. | ✓ | ✓ | |
| The swimming pool must be outdoors. | ✓ | ✓ | |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|------------------------------|-----------------|
| Hot water | | | |
| The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5 stars. | ✓ | ✓ | ✓ |
| Cooling system | | | |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 2.5 - 3.0 | | ✓ | ✓ |
| The cooling system must provide for day/night zoning between living areas and bedrooms. | | ✓ | ✓ |
| Heating system | | | |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5 | | ✓ | ✓ |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5 | | ✓ | ✓ |
| The heating system must provide for day/night zoning between living areas and bedrooms. | | ✓ | ✓ |
| Ventilation | | | |
| The applicant must install the following exhaust systems in the development: At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off Laundry: individual fan, ducted to façade or roof; Operation control: interlocked to light | | ✓ ✓ ✓ | ✓ ✓ ✓ |
| Artificial lighting | | | |
| The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps: <ul style="list-style-type: none">at least 4 of the bedrooms / study; | | ✓ | ✓ |

all downlights to be 90 mm dia.
all recessed downlights to be sealed to prevent air leakage
and IC rated with insulation installed continuously over



4.55 MK 2 ISSUE

| | | | | |
|--|--|---|-------------|------------------|
| REVISION REV K 02.04.25 WINDOWS W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CARPORT WIDENED. |  peterdownes multi-award winner designs 77 Riviera Ave, Avalon Beach 2107 0488 662 445 www.peterdownes.com.au | PROJECT new dwelling at 190 McCarrs Creek rd Church Point DRAWING BASIX sht 1 | DRAWN PD | CHECKED PD |
| | | | SCALE | DATE 22/06/21 |
| | | | DRG. A3 | 2012 18 K |

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--|------------------|------------------------------|-----------------|
| • at least 3 of the living / dining rooms; | | ✓ | ✓ |
| • the kitchen; | | ✓ | ✓ |
| • all bathrooms/toilets; | | ✓ | ✓ |
| • the laundry; | | ✓ | ✓ |
| • all hallways; | | ✓ | ✓ |
| Natural lighting | | | |
| The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting. | ✓ | ✓ | ✓ |
| The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting. | ✓ | ✓ | ✓ |
| Swimming pool | | | |
| The development must not incorporate any heating system for the swimming pool. | | ✓ | |
| The applicant must install a timer for the swimming pool pump in the development. | | ✓ | |
| Alternative energy | | | |
| The applicant must install a photovoltaic system with the capacity to generate at least 1 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system. | ✓ | ✓ | ✓ |
| Other | | | |
| The applicant must install a gas cooktop & gas oven in the kitchen of the dwelling. | | ✓ | |
| The applicant must install a fixed outdoor clothes drying line as part of the development. | | ✓ | |

BASIX

Planning, Industry & Environment

www.basix.nsw.gov.au

Version: 3.0 / DARWINIA_3_15_1

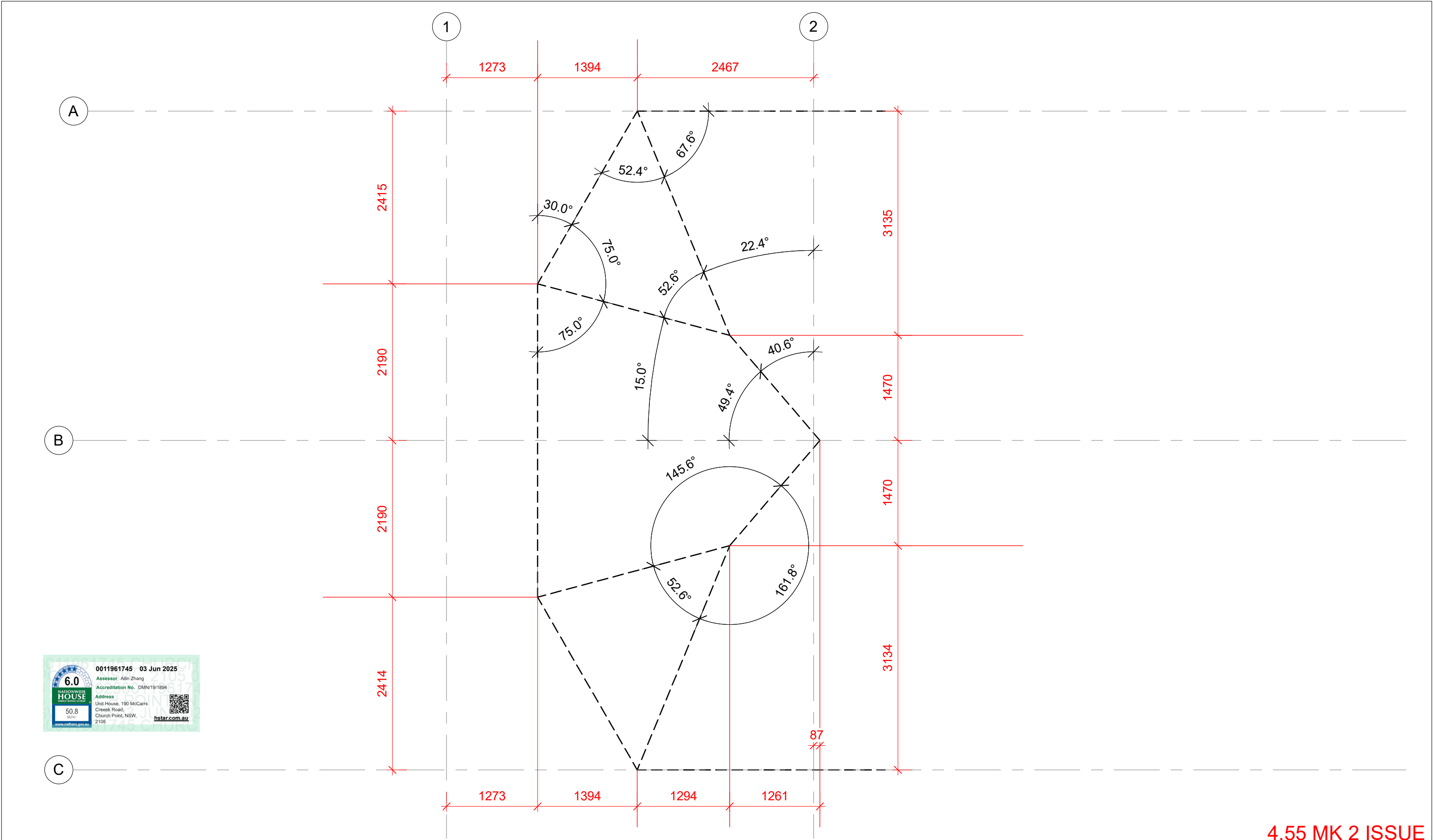
Certificate No.: 1179704S

Thursday, 25 February 2021

page 7/8

4.55 MK 2 ISSUE

| | | | | | | |
|----------|---|--|---|--|----------------------|------------------|
| REVISION | REV K 02.04.25 WINDOWS W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 INCLINE LIFT AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CAROIRT WIDENED. |  <div><div>peterdownes</div><div>multi-award winner</div><div>77 Riviera Ave, Avalon Beach 2107 0488 662 445</div><div>www.peterdownes.com.au</div></div> | PROJECT new dwelling at 190 McCarrs Creek rd Church Point | | DRAWN PD | CHECKED PD |
| | | | DRAWING BASIX sht 2 | | SCALE | DATE 22/06/21 |
| | | | | | DRG. A3 2012 19 K | |



4.55 MK 2 ISSUE

| | | | | | | |
|----------|---|---|--|---|-----------------|------------------|
| REVISION | REV K 02.04.25 WINDOW'S W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 FIXED. INCLINE LIFT AND AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CAROIRT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. WATER TANK RELOCATED. PRIVACY SCREEN ADDED TO CAPORT |  |  77 Riviera Ave, Avalon Beach 2107 0488 662 445 www.peterdownes.com.au | PROJECT new dwelling at 190 McCarrs Creek rd Church Point | DRAWN PD | CHECKED PD |
| | | | | DRAWING level 3 balcony roof set out dimensions | SCALE 1 : 50 | DATE 12.05.22 |
| | | | | | DRG. A3 | 2012 23 K |
| | | | | | | |



| WINDOW AND DOOR SCHEDULE | | | | |
|--------------------------|-------------|-------|--------|---------------------------|
| Mark | Orientation | Width | Height | Description |
| | | | | |
| W1 | N | 2800 | 800 | 1 fixed, 1 tilt and turn |
| W2 | W | 1700 | 1400 | 1 fixed |
| W3 | W | 1700 | 1400 | 1 fixed |
| W4 | S | 800 | 800 | 1 tilt and turn |
| W5 | S | 800 | 800 | 1 tilt and turn |
| W6 | N | 800 | 800 | 1 tilt and turn - obs |
| W6A | N | 1800 | 1200 | 2 tilt and turn |
| W7 | N | 3600 | 800 | 1 fixed, 2 tilt and turn |
| W8 | N | 4400 | 800 | 3 fixed |
| W9A | W | 500 | 720 | 1 fixed |
| W9B | W | 500 | 720 | 1 tilt and turn |
| W9C | W | 500 | 800 | 1 tilt and turn |
| W12A | W | 500 | 720 | 1 fixed |
| W12B | W | 500 | 720 | 1 tilt and turn |
| W12C | W | 500 | 800 | 1 tilt and turn |
| W13 | S | 4400 | 800 | 3 fixed |
| W14 | S | 2500 | 800 | 1 fixed, 1 tilt and turn |
| W15 | N | 800 | 800 | 1 tilt and turn - obs |
| W16 | N | 600 | 800 | 1 tilt and turn - obs |
| W17A | W | 500 | 720 | 1 fixed |
| W17B | W | 500 | 720 | 1 tilt and turn |
| W17C | W | 500 | 800 | 1 tilt and turn |
| W19 | SW | 600 | 2400 | 1 tilt and turn |
| W21A | W | 500 | 720 | 1 fixed |
| W21B | W | 500 | 720 | 1 tilt and turn |
| W21C | W | 500 | 800 | 1 tilt and turn |
| W22 | S | 800 | 800 | 1 tilt and turn - frosted |
| W23 | S | 3300 | 800 | 1 fixed, 1 tilt and turn |
| W24A | W | 500 | 720 | 1 fixed |
| W24B | W | 500 | 720 | 1 tilt and turn |
| W24C | W | 500 | 800 | 1 tilt and turn |
| W27A | W | 500 | 720 | 1 fixed |
| W27B | W | 500 | 720 | 1 tilt and turn |
| W27C | W | 500 | 800 | 1 tilt and turn |
| W28 | S | 800 | 800 | 1 tilt and turn |
| W29 | S | 800 | 800 | 1 tilt and turn - frosted |
| W30 | | 0 | 0 | not used |
| W31 | | 0 | 0 | not used |
| W32 | W | 3460 | 1650 | multiple fixed panels |
| W33 | W | 3460 | 1650 | multiple fixed panels |
| W34 | S | 1600 | 800 | 2 tilt and turn |
| D1 | | 0 | 0 | not used |
| D2 | N | 1100 | 2400 | selected timber door |
| D3 | W | 7200 | 2400 | 6 panel stacker |
| D4 | NW | 3900 | 2400 | 3 panel stacker |
| D5 | SW | 2400 | 2400 | 3 panel stacker |
| D6 | W | 3300 | 2400 | 3 panel stacker |
| D7 | W | 3300 | 2400 | 3 panel stacker |
| D8 | | 0 | 0 | not used |
| D9 | S | 800 | 2100 | solid swing |
| | | | | |

WINDOW AND DOOR NOTES

all windows and doors to be UPVC, double glazed and Argon filled.

all window and door dimensions to be verified by the builder


all doors and windows to be fitted with draft seals

frosted glass to W10A, 10B, 11A, 11B, 18A, 18B 20A and 20B

all window openings to be in accordance with BCA 3.9.2.6 and 3.9.2.7

all internal doors to be 820 x 2400

4.55 MK 2 ISSUE

| | | | |
|--|-------------|--------------------------|------------------|
| PROJECT | DRAWN PD | CHECKED PD | DATE 07/27/21 |
| | | SCALE | |
| | DRG. A3 | | 2012 20 K |
| new dwelling at 190 McCarrs Creek rd Church Point | | window and door schedule | |
| DRAWING | | | |
| <div><div><p>peterdownes multi-award winner designs</p><p>77 Riviera Ave, Avalon Beach 2107 0488 662 445 www.peterdownes.com.au</p></div><div><p>BUILDING DESIGNERS AUSTRALIA NSW</p></div></div> | | | |
| REV K 02.04.25 WINDOWS W10A, 10B, 10C, 11A, 11B, 11C, 18A, 18B, 18C, 20A, 20B, 20C DELETED. FOYER SKYLIGHT DELETED. ENSUITE ALTERED. W15 MOVED. POOL SHORTENED. VARIOUS WINDOWS CHANGED FROM LOUVRE TO TILT AND TURN. GARAGE CHANGED TO WORKSHOP AND DOOR ALTERED. DOOR ADDED BETWEEN LAUNDRY AND LEVEL 2 BATHROOM. NORTH AND SOUTH SETBACKS ALTERED. AWNING OVER W7 AND W8 REDUCED FROM 500 TO 400. W8 WAS 1 LOUVRE AND 1 FIXED. W13 WAS 2 LOUVRE AND 1 1 FIXED. INCLINE LIFT AND AND LANDINGS DELETED. NEW WALKWAY ADDED TO LEVEL 4. CAROIRT ROOF WIDENED. AWNINGS OVER W6 AND 6A DELETED. | | | |
| REVISION | | | |