

Summary Report

ENERGY EFFICIENCY

SRS Reference:20082

(Building assessment modelled with Berspro V4.2)

Report details

For Dwelling 1

Address :Dwelling 1, 82- 90 Johns Street, Prospect
Date :28/05/20
Development Application Ref :TBA
Development Description :Proposed 1 of 8 three storey attached dwelling
Reference documents : Citify/BFC – Gemma Lea Studio
Climate Zone :Nathers 16

Heating and Cooling Load Limits

A Class 1 building must not exceed the heating and cooling load limits corresponding to–

(a) the targeted star rating in subclause 3.12.0.1(a) of Volume Two of the NCC; and

(b) the floor type of the lowest living area;

where–

(c) the heating and cooling load limits in Tables 1, 3 and 5 apply if the floor is a Concrete Slab-on-Ground (CSOG); and

(d) the heating and cooling load limits in Tables 2, 4 and 6 apply if the floor is–

(i) a Suspended Floor (SF) of timber or concrete; or

(ii) a mixture of CSOG and SF

Building Class	2			
Floor Type	Concrete slab on ground			
Heating Load Limit	58 MJ/m2	Heating Load Achieved	50.7 MJ/m2	complies
Cooling Load Limit	53MJ/m2	Cooling Load Achieved	44.1 MJ/m2	complies

Prepared by:

Stewart Gowers

Accreditation No: VIC/BDV/A7/1815

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Building Fabric

Proposed building minimum requirement

Roof	Roof blanket , Anticon 55 or equal ,R1.3 laid under metal roof deck
Ceiling	Mineral fibre batt minimum R4.0
External Wall	Ground Level: AAC panel clad frame - Bulk insulation, nom R2.5 within w/frame cavity and overlay wall framing with breathable reflective wall wrap First Level: Fibre cement sheet clad frame - Bulk insulation, nom R2.5 within w/frame cavity and overlay wall framing with breathable reflective wall wrap Second Level: Fibre cement sheet clad frame - Bulk insulation, nom R2.5 within w/frame cavity and overlay wall framing with breathable reflective wall wrap Party Walls: Shaft liner separating lined structural wall framing. Include bulk insulation R2.5 within party wall framing
Internal walls	Include bulk insulation within all partition wall framing cavity space R2.0
Windows	Aluminium frame , glaze to AS1288. Refer to build data report for maximum window thermal performance values that apply
Floor	Ground level – concrete slab on ground. First Level – suspended timber frame, sheet floor. Include Foilboard Green 12 (R1.5)between floor joist to those areas of upper floor exposed to outside atmosphere Second Level – suspended timber frame, sheet floor. Include Foilboard Green 12 (R1.5)between floor joist to those areas of upper floor exposed to outside atmosphere
Artificial Lighting	Refer appendix B and associated table 3.12.5.3 for details

3.12.3 Building Sealing

External entry door fitted with approved seal to door opening edges

External windows and sliding door assemblies factory fitted with approved seals to all opening edges

3.12.3.3 External windows and doors

(a) A seal to restrict air infiltration shall be fitted to each edge of an external door, open able window and other such opening—

- (i) when serving a conditioned space; or
- (ii) in climate zones 6, when serving a habitable room.

(b) The following need not comply with (a):—

- (ii) A window complying with the maximum air infiltration rates specified in AS 2047.
- (c) A seal required by (a) shall be either a foam or rubber compressible strip, fibrous seal or the like.

3.12.3.4 Exhaust fans

An exhaust fan must be fitted with a sealing device such as a self-closing damper, filter or the like when serving—

- (a) a conditioned space; or
- (b) a habitable room in this climate zone.
- (a) Air movement must be provided to habitable rooms in accordance with Table 3.12.4.1.

3.12.4.1 Air movement

Table 3.12.4.1 PROVISION FOR AIR MOVEMENT

Climate Zone	Without a ceiling fan or evaporative cooler	With a ceiling fan	With an evaporative cooler
5	7.5%	5%	7.5% (see Note)

Note: Because evaporative coolers are less effective than ceiling fans in more humid locations, the requirement for ventilation opening in climate zones 1, 2 and 5 with an evaporative cooler is the same as without one.

Building modelled with Berspro including windows as documented with assigned openings. Refer Build data report for details. Natural ventilation provisions included within the calculated thermal performance

3.12.5 Services

3.12.5.5 Artificial lighting

***New surface mounted LED lighting has been assumed. Where lighting installation involves unsealed ceiling penetration this assessment may be invalidated
Please consult with the assessor if this is to be the case***

(a) The lamp power density or illumination power density of artificial lighting, excluding heaters that emit light, must not exceed—

(i) in a Class 1 building, 5 W/m²; and

(ii) on a verandah or balcony attached to a Class 1 building, 4 W/m²; and

where illumination power density is used, it may be increased by dividing it by the illumination power density adjustment factor in Table 3.12.5.3

Refer Appendix B for lamp power distribution provisional allowances

Hot Water Service

(a) The hot water supply system must be designed and installed in accordance with Section 8 of AS/NZS 3500.4 or clause 3.38 of AS/NZS 3500.5.

3.12.5.1 Insulation of services

Thermal insulation for central heating water piping and heating and cooling ductwork shall be—

(a) protected against the effects of weather and sunlight; and

(b) able to withstand the temperatures within the piping or ductwork.

Where, for operational or safety reasons associated with exhaust fans, flues or recessed downlights, the area of required ceiling insulation is reduced, the loss of insulation must be compensated for by increasing the R-Value of insulation in the remainder of the ceiling in accordance with Table 3.12.1.1b.

Water Efficiency

SA 2.2.2 Rainwater tank capacity

(a) Where the roof catchment area of the building is not less than 50 m², the building must be designed to ensure that surface water run-off from not less than 50m² of the roof catchment area is:

(i) collected by a drainage system complying with Clauses 3.5.1 and 3.5.2 of the Building Code of Australia and;

(ii) stored in a rainwater tank, the storage capacity of which is not less than 1 kilolitre (1000 litres); and

(iii) plumbed to at least a water closet or a water heater or all laundry cold water outlets.

SA 2.2.4 Rainwater tank water quality

The inlet and overflow of the rainwater tank must be fitted with mosquito proof, non-degradable screens.

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NOTES

General enhancement

Building model may be enhanced for the purposes of determining minimum 6 star energy efficiency compliance levels required.

Where bulk insulation is included it relates only to the minimum R value achieved and as such is selected for its generic thermal performance value only. Where bulk insulation is required within limited space an approved insulation material of equal equivalent thermal value to that stated as the minimum required within the body of the report shall be used to meet the stated minimum thermal performance requirement.

Windows/Glazed doors

Where windows/glazed doors are included on the drawings without specific reference to a proprietary item the building model shall include generic windows/glazed doors with features matching as close as possible to those stated on the drawings submitted for assessment. Those features may include frame type, sash type and finished colour, but as a minimum not less than overall framed height and width. It is important to note that the report may include improved window/glazed door elements selected for the purposes of achieving minimum compliance. Where windows/glazed door elements have been selected for the model they may not be the least cost of their type or the best performing of their class but selected for their thermal performance characteristics and suitability for exposure.

Any window/glazed door that has been enhanced (ie double glaze low e)for the model is proposed in a generic sense only. Final window scheduling for building construction phase should take account of energy rating report generic window selections and their associated thermal performance values as a guide for determining an equal equivalent proprietary item in order to ensure the final installation achieves the required energy efficiency level.

Where a report calls up a proprietary item this is done so to illustrate the potential for compliance the particular characteristics offered with that specific item. It is not intended that the final construction shall include that exact item to the exclusion of all others ,rather the individual element should match with an equal equivalent item that will be available from the plethora of manufactured and custom built items available throughout the country.

Star Rate Services are happy to assist with final selection of window/glazed doors checks to ensure compliance will be achieved.

Manufacturers Labelling and Certification.

It is important for the building owner to request and receive from the window manufacturer a certificate of compliance stating the performance characteristics of each item supplied. This is an important document to receive as it will underscore the level of energy efficiency your home will achieve.

Statement of Compliance – Schedule 19A.

Star Rate Services offer an as installed inspection for compliance with the energy efficiency requirements called up in this assessment report. This inspection is designed to confirm that all required energy efficiency provisions (glazing, insulation, shading, ventilation, sealing, lighting) have been supplied as stated in this report and installed in accordance with the relevant manufacturers specification. It offers peace of mind to the building owner and ensures that the buildings thermal performance is consistent with calculated rating level.

Inspection may require more than one attendance to capture all energy efficiency measure installations.

Please contact Star Rate Services for any query relating to our Inspection Services.

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0004871638

Generated on 28 May 2020 using BERS Pro v4.4.0.1 (3.21)

Property

Address	Unit Dwelling1, 82 Johns Rd , Prospect , SA , 5082
Lot/DP	N/A
NCC Class*	2
Type	New Dwelling

Plans

Main Plan	20082_D1
Prepared by	Citify

Construction and environment

Assessed floor area (m ²)*	Exposure Type
Conditioned*	97.0
Unconditioned*	31.0
Total	128.0
Garage	26.0
	NatHERS climate zone
	16



Accredited assessor

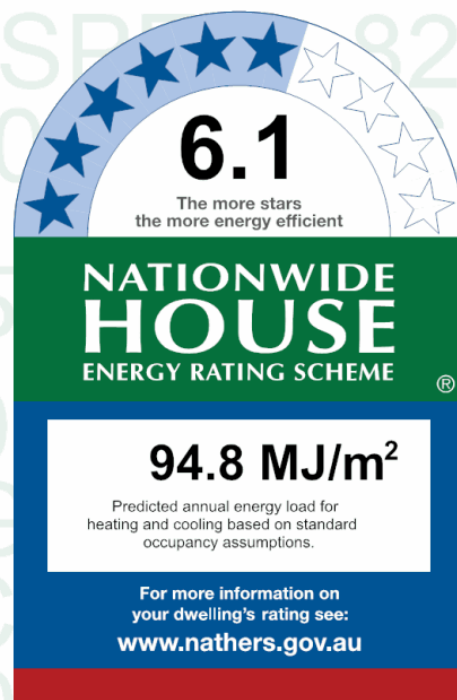
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Assessor Accrediting Organisation	BDAV
Declaration of interest	None

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.



Thermal performance

Heating	Cooling
50.7 MJ/m ²	44.1 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=sxxLBxLMX.

When using either link, ensure you are visiting hstar.com.au



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?

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

Artificial lighting modelled in accordance with NatHERS Tech Note

Overshadowing features modelled from documentation and reference to site from SA Property Location Browser

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
ALM-006-03 A	ALM-006-03 A Aluminium B DG Argon Fill High Solar Gain low-E -Clear	4.1	0.52	0.49	0.55

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*
Bedroom 1	ALM-006-03 A	n/a	2400	2500	n/a	50	S	No

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Study	ALM-006-03 A	n/a	600	2400	n/a	40	W	No
Kitchen/Living	ALM-006-03 A	n/a	600	2400	n/a	00	N	No
Kitchen/Living	ALM-006-03 A	n/a	1500	600	n/a	00	S	No
Kitchen/Living	ALM-006-03 A	n/a	2400	2500	n/a	50	S	No
Kitchen/Living	ALM-006-03 A	n/a	600	2400	n/a	40	W	No
Bedroom 1	ALM-006-03 A	n/a	1800	2400	n/a	20	N	No
Bedroom 2	ALM-006-03 A	n/a	2100	2500	n/a	40	S	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
Entry	2040	820	90	S
Garage	2040	820	90	E

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage	2040	2400	90	N

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	AAC Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R1	No
EW-2	Brick Veneer	0.50	Medium	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes
EW-3	AAC Cavity Panel Direct Fix	0.50	Medium	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes
EW-4	Fibro Cavity Panel on Battens	0.50	Medium	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bedroom 1	EW-1	2800	3395	S	1900	NO
Entry	EW-1	2800	995	S	1900	NO
Entry	EW-2	2800	2895	W	75	NO
Garage	EW-1	2800	1350	N	0	NO
Garage	EW-1	2800	2050	E	50	YES
Garage	EW-1	2800	3050	N	50	YES
Garage	EW-2	2800	2690	W	50	NO
Garage	EW-2	2800	3095	W	0	NO
WC	EW-2	2800	1990	W	25	NO
Study	EW-3	3100	2890	W	50	NO
Kitchen/Living	EW-3	3100	4400	N	1000	NO
Kitchen/Living	EW-3	3100	4400	S	700	NO
Kitchen/Living	EW-3	3100	4895	W	75	NO
Kitchen/Living	EW-3	3100	3895	W	25	NO
Bedroom 1	EW-4	2700	4400	N	1100	NO
Bedroom 1	EW-3	2700	3695	W	0	NO
Bedroom 2	EW-4	2700	4400	S	100	NO
Bedroom 2	EW-3	2700	1895	W	0	NO
Stair	EW-3	2700	4090	W	0	NO

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1	Cavity wall, direct fix plasterboard, single gap	94.00	Bulk Insulation, No Air Gap R2
IW-2	Shaft liner party wall multi plaster layers	60.00	Bulk Insulation both sides of air gap R2.5
IW-3	Shaft liner party wall with plaster	26.00	Reflective foil on Bulk, both sides R2.5

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 1	Concrete Slab on Ground 100mm	8.70	None	No Insulation	Carpet 10mm
Entry	Concrete Slab on Ground 100mm	3.50	None	No Insulation	Ceramic Tiles 8mm
Garage	Concrete Slab on Ground 100mm	25.90	None	No Insulation	Bare
WC	Concrete Slab on Ground 100mm	1.60	None	No Insulation	Ceramic Tiles 8mm
Study/Garage	Timber Above Plasterboard 19mm	3.20		Foil Sided Bulk R1.5	Carpet 10mm
Study/WC	Timber Above Plasterboard 19mm	1.00		Foil Sided Bulk R1.5	Carpet 10mm
Kitchen/Living/Bedroom 1	Timber Above Plasterboard 19mm	3.80		No Insulation	Carpet 10mm
Kitchen/Living/Entry	Timber Above Plasterboard 19mm	2.30		No Insulation	Carpet 10mm
Kitchen/Living/Garage	Timber Above Plasterboard 19mm	22.70		Foil Sided Bulk R1.5	Carpet 10mm
Kitchen/Living/WC	Timber Above Plasterboard 19mm	0.70		Foil Sided Bulk R1.5	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	17.00	Open	Foil Sided Bulk, Anti-glare Down, Gap to Floor R1.5	Carpet 10mm
Bedroom 1/Study	Timber Above Plasterboard 100mm	4.60		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 100mm	11.50		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	3.70		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.20	Enclosed	Foil Sided Bulk, Anti-glare Down, Gap to Floor R1.5	Carpet 10mm
En suite 1/Kitchen/Living	Timber Above Plasterboard 100mm	3.50		No Insulation	Ceramic Tiles 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 100mm	3.50		No Insulation	Ceramic Tiles 8mm
Stair/Kitchen/Living	Timber Above Plasterboard 100mm	6.50		No Insulation	Carpet 10mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bedroom 1	Plasterboard	Bulk Insulation R2.5	No
Bedroom 1	Timber Above Plasterboard	No Insulation	No
Entry	Plasterboard	Bulk Insulation R2.5	No
Entry	Timber Above Plasterboard	No Insulation	No
Garage	Timber Above Plasterboard	Foil Sided Bulk R1.5	Yes
WC	Timber Above Plasterboard	Foil Sided Bulk R1.5	Yes
Study	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R4	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R4	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bedroom 2	Plasterboard	Bulk Insulation R4	No
En suite 1	Plasterboard	Bulk Insulation R4	No
Bath	Plasterboard	Bulk Insulation R4	No
Stair	Plasterboard	Bulk Insulation R4	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
Bedroom 1	4	Downlights - LED	150	Sealed
Entry	1	Downlights - LED	150	Sealed
Garage	3	Downlights - LED	150	Sealed
WC	1	Downlights - LED	150	Sealed
WC	1	Exhaust Fans	300	Sealed
Study	1	Downlights - CFL	160	Sealed
Kitchen/Living	9	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
En suite 1	1	Downlights - LED	150	Sealed
En suite 1	1	Exhaust Fans	300	Sealed
Bath	1	Downlights - CFL	160	Sealed
Bath	1	Exhaust Fans	300	Sealed
Stair	2	Downlights - LED	150	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	No Insulation, Only an Air Gap	0.50	Medium
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.50	Medium
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above 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 10m 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).

Building Element Details

Project 20082_D1-REFINE1 Run 1
PROSPECT PC 5082 Lat -34.90 Long 138.60 Climate File climat16.TXT

Summary

Conditioned Area	98.9 m ² (96.7 m ²)
Unconditioned Area	31.8 m ² (31.0 m ²)
Glazed Common Area	0.0 m ² (0.0 m ²)
Total Floor Area	130.7 m ² (127.6 m ²)
Total Glazed Area	26.8 m ²
Total External Solid door Area	8.2 m ²
Glass to Floor Area	20.5 %
Gross External Wall Area	173.8 m ²
Net External Wall Area	138.8 m ²

Window

26.8 m ²	ALM-006-03 A DEFAULTS	Uval 4.10	SHGC 0.52
	Glass	Argon Fill High Solar Gain low-E	-Clear
	Frame	ALM-006 Aluminium Group B	DG Argon Fill

External Wall

16.1 m ²	AAC Cavity Panel Direct Fix	Bulk Insulation R1.00
30.0 m ²	Brick Veneer	Bulk+Foil, Reflective One Side, Anti-glare Other R2.50
78.5 m ²	AAC Cavity Panel Direct Fix	Bulk+Foil, Reflective One Side, Anti-glare Other R2.50
14.2 m ²	Fibro Cavity Panel on Battens	Bulk+Foil, Reflective One Side, Anti-glare Other R2.50

Internal Wall

94.4 m ²	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation, No Air Gap R 2.0
60.5 m ²	Shaft liner party wall multi plaster layers	Bulk Insulation both sides of air gap R 2.5
26.2 m ²	Shaft liner party wall with plaster	Reflective foil on Bulk, both sides of Shaft liner R 2.5

External Floor

9.0 m ²	Concrete Slab on Ground 100mm	Carpet 10mm	No Insulation
5.6 m ²	Concrete Slab on Ground 100mm	Ceramic Tiles 8mm	No Insulation
26.3 m ²	Concrete Slab on Ground 100mm	Bare	No Insulation
25.6 m ²	Suspended Timber Floor 19mm	Carpet 10mm	Foil Sided Bulk, Anti-glare Down, Gap to Floor R 1.5

External Ceiling

6.6 m ²	Plasterboard	Bulk Insulation R2.5 Unventilated roofspace
59.8 m ²	Plasterboard	Bulk Insulation R4.0 Unventilated roofspace

Internal Floor/Ceiling

40.5 m ²	Timber Above Plasterboard	No Insulation
28.1 m ²	Timber Above Plasterboard	Foil Sided Bulk R 1.5

Roof (Horizontal area)

5.1 m ²	Corrugated Iron	No Insulation, Only an Air Gap	22° slope	Hip roof
1.5 m ²	Corrugated Iron	No Insulation, Only an Air Gap	22° slope	Skillion roof
17.2 m ²	Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R 1.3	2° slope	Skillion roof
42.7 m ²	Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R 1.3	8° slope	Skillion roof

Details													
Zone 1	Bedroom 1		Bedroom Area on Level 1										
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans					
	Yes	Yes	No	No	0	0	0	No					
Ceiling Penetrations	Category		Seals	Type	Clearance		Number						
	Downlight		Yes	LED	150mm	4							
External Floor					Area	Covering	Type						
					8.96	Carpet 10mm	Concrete Slab on Ground	100mm	No Insulation				
Internal Ceiling					Area	Type							
					3.85	Timber Above Plasterboard	No Insulation						
Ceiling	Slope					Area	Type						
							Insulation						
							Above Ceiling						
	0					5.11	Plasterboard						
							Bulk Insulation R2.50						
							Unventilated roofspace cavity						
Roof	Slope		Shape		Type		Solar Abs						
	22		Hip				Corrugated Iron 0.50 No Insulation, Only an Air Gap						
Internal Wall	Length	Height			Area	Type							
Wall I 1	2.90	2.80			8.12	Shaft liner party wall multi plaster layers Bulk Insulation both							
Partition Wall	Length	Height	AdjZ		Area	Type							
Wall P 1	2.40	2.80	3		6.72	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Wall P 4	2.00	2.80	2		5.60	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Wall P 5	1.00	2.80	2		1.13	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Door Int	Width	Height	AdjZ		Area	Type							
Door I(5, 1)	0.82	2.04	2		1.67	Hollow core door							
Wall P 6	0.90	2.80	2		2.52	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs						
						Insulation							
Wall E 3	3.40	2.80	1.90	180	3.52	AAC Cavity Panel Direct Fix		0.50					
						Bulk Insulation R1.00							
Window	Width	Height	Eaves	Orient	Area	Name	Glass	Frame					
						Opening	Covering						
						Shading							
Window(3, 1)	2.50	2.40	1.90	180	6.00	ALM-006-03 A	Argon Fill High Solar Gain low-E -Clear	ALM-006 AL					
						Sliding None							
						No Shading							
Zone 2	Entry	Day Time	Area on Level 1										
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans					
	Yes	Yes	No	No	0	0	0	No					
Ceiling Penetrations	Category		Seals	Type	Clearance		Number						
	Downlight		Yes	LED	150mm	1							
External Floor					Area	Covering	Type						
					3.80	Ceramic Tiles 8mm	Concrete Slab on Ground	100mm	No Insulation				
Internal Ceiling					Area	Type							
					2.30	Timber Above Plasterboard	No Insulation						
Ceiling	Slope					Area	Type						
							Insulation						
							Above Ceiling						
	0					1.50	Plasterboard						
							Bulk Insulation R2.50						
							Unventilated roofspace cavity						
Roof	Slope		Shape		Type		Solar Abs						
	22		Skillion				Corrugated Iron 0.50 No Insulation, Only an Air Gap						
Internal Wall	Length	Height			Area	Type							
Partition Wall	Length	Height	AdjZ		Area	Type							
Wall P 1	2.00	2.80	3		3.93	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Door Int	Width	Height	AdjZ		Area	Type							
Door I(1, 1)	0.82	2.04	3		1.67	Hollow core door							
Wall P 2	0.90	2.80	1		2.52	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Wall P 3	1.00	2.80	1		1.13	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
Door Int	Width	Height	AdjZ		Area	Type							
Door I(3, 1)	0.82	2.04	1		1.67	Hollow core door							
Wall P 4	2.00	2.80	1		5.60	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,							
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs						
						Insulation							

Wall E	5	1.00	2.80	1.90	180	1.13	AAC Cavity Panel Direct Fix	0.50	
							Bulk Insulation R1.00		
Door Ext		Width	Height	Eaves	Orient	Area	Type		
Door E(5, 1)		0.82	2.04	1.90	180	1.67	Solid timber door		
Wall E	6	2.90	2.80	0.07	270	8.12	Brick Veneer	0.50	
							Bulk+Foil, Reflective One Side, Anti-glare Other	R2.50	
Zone 3	Garage		Garage	Area on Level 1					
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans	
	Yes	No	No	No	0	0	0	No	
Ceiling Penetrations	Category		Seals	Type	Clearance	Number			
	Downlight		Yes	LED	150mm	3			
Void	Area	To Zone							
Void 1	2.16	6							
External Floor					Area	Covering	Type		
					26.27	Bare Concrete Slab on Ground 100mm	No Insulation		
Internal Ceiling					Area	Type			
					26.26	Timber Above Plasterboard	Foil Sided Bulk R1.50		
Internal Wall	Length	Height			Area	Type			
Wall I	3	5.75	2.80		16.10	Shaft liner party wall multi plaster layers	Bulk Insulation both		
Partition Wall	Length	Height		AdjZ	Area	Type			
Wall P	5	2.40	2.80	1	6.72	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Wall P	6	2.00	2.80	2	3.93	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Door Int	Width	Height		AdjZ	Area	Type			
Door I(6, 1)	0.82	2.04		2	1.67	Hollow core door			
Wall P	8	0.90	2.80	4	2.52	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Wall P	9	2.00	2.80	4	4.13	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Door Int	Width	Height		AdjZ	Area	Type			
Door I(9, 1)	0.72	2.04		4	1.47	Hollow core door			
Wall P	10	0.90	2.80	4	2.52	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs		
						Insulation			
Wall E	1	1.35	2.80	0.00	0	3.78	AAC Cavity Panel Direct Fix	0.50	
							Bulk Insulation R1.00		
Wall E	2	2.05	2.80	0.05	90	4.07	AAC Cavity Panel Direct Fix	0.50	
							Bulk Insulation R1.00		
Door Ext	Width	Height	Eaves	Orient	Area	Type			
Door E(2, 1)	0.82	2.04	0.05	90	1.67	Solid timber door			
Wall E	3	3.05	2.80	0.05	0	3.64	AAC Cavity Panel Direct Fix	0.50	
							Bulk Insulation R1.00		
Door Ext	Width	Height	Eaves	Orient	Area	Type			
Door E(3, 1)	2.40	2.04	0.05	0	4.90	Steel door			
Wall E	7	2.70	2.80	0.05	270	7.56	Brick Veneer	0.50	
							Bulk+Foil, Reflective One Side, Anti-glare Other	R2.50	
Wall E	11	3.10	2.80	0.00	270	8.68	Brick Veneer	0.50	
							Bulk+Foil, Reflective One Side, Anti-glare Other	R2.50	
Zone 4	WC		Unconditioned	Area on Level 1					
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans	
	Yes	Yes	No	No	0	0	1	No	
Ceiling Penetrations	Category		Seals	Type	Clearance	Number			
	Downlight		Yes	LED	150mm	1			
	Ex. Fan(Ceil)	Yes			300mm	1			
External Floor					Area	Covering	Type		
					1.80	Ceramic Tiles 8mm	Concrete Slab on Ground 100mm	No Insulation	
Internal Ceiling					Area	Type			
					1.80	Timber Above Plasterboard	Foil Sided Bulk R1.50		
Internal Wall	Length	Height			Area	Type			
Partition Wall	Length	Height		AdjZ	Area	Type			
Wall P	1	0.90	2.80	3	2.52	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Wall P	2	2.00	2.80	3	4.13	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Door Int	Width	Height		AdjZ	Area	Type			
Door I(2, 1)	0.72	2.04		3	1.47	Hollow core door			
Wall P	3	0.90	2.80	3	2.52	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs		
						Insulation			
Wall E	4	2.00	2.80	0.03	270	5.60	Brick Veneer	0.50	

Zone 5	Study	Day Time	Area on Level 2						
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans	
	Yes	Yes	No	No	0	0	0	No	
Ceiling Penetrations	Category		Seals	Type	Clearance	Number			
	Downlight		Yes	CFL	160mm	1			
Internal Ceiling					Area	Type			
					4.64	Timber Above Plasterboard	No Insulation		
Int Floor Cover					Area	Type			
					4.47	Carpet 10mm			
Internal Wall	Length	Height			Area	Type			
Partition Wall	Length	Height		AdjZ	Area	Type			
Wall P 1	1.60	3.10		6	4.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Wall P 2	2.90	3.10		6	7.32	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Door Int	Width	Height		AdjZ	Area	Type			
Door I(2, 1)	0.82	2.04		6	1.67	Hollow core door			
Wall P 3	1.60	3.10		6	4.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs		
						Insulation			
Wall E 4	2.90	3.10	0.05	270	7.55	AAC Cavity Panel Direct Fix	0.50		
						Bulk+Foil, Reflective One Side, Anti-glare Other R2.50			
Window	Width	Height	Eaves	Orient	Area	Name	Glass	Frame	
						Opening	Covering		
						Shading			
Window(4, 1)	2.40	0.60	0.05	270	1.44	ALM-006-03 A	Argon Fill High Solar Gain low-E -Clear	ALM-006 A	
						Awning	None		
						No Shading			
Zone 6	Kitchen/Living		Kitchen/Living Area on Level 2						
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans	
	Yes	Yes	No	No	0	0	1	No	
Ceiling Penetrations	Category		Seals	Type	Clearance	Number			
	Downlight		Yes	LED	150mm	9			
	Ex. Fan(Ceil)		Yes		300mm	1			
Void	Area	To Zone							
Void 1	2.16	3							
Void 2	2.16	11							
External Floor					Area	Covering	Type		
						Insulation			
						Under Floor			
					17.10	Carpet 10mm	Suspended Timber Floor 19mm		
						Foil Sided Bulk, Anti-glare Down, Gap to Floor R1.50			
						Open Floor Height 2800			
Internal Ceiling					Area	Type			
					29.67	Timber Above Plasterboard	No Insulation		
Int Floor Cover					Area	Type			
					29.74	Carpet 10mm			
Ceiling		Slope			Area	Type			
						Insulation			
						Above Ceiling			
		0			17.17	Plasterboard			
						Bulk Insulation R4.00			
						Unventilated roofspace cavity			
Roof		Slope		Shape		Type	Solar Abs		
						Insulation			
		2		Skillion		Corrugated Iron	0.50		
						Bulk, Reflective Side Down, No Air Gap Above R1.30			
Internal Wall	Length	Height			Area	Type			
Wall I 1	11.70	3.10			36.27	Shaft liner party wall multi plaster layers	Bulk Insulation both		
Partition Wall	Length	Height		AdjZ	Area	Type			
Wall P 5	1.60	3.10		5	4.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Wall P 6	2.90	3.10		5	7.32	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
Door Int	Width	Height		AdjZ	Area	Type			
Door I(6, 1)	0.82	2.04		5	1.67	Hollow core door			
Wall P 7	1.60	3.10		5	4.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,		
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs		

Wall E	1	4.40	3.10	1.00	0	12.20	Insulation			
Window		Width	Height	Eaves	Orient	Area	AAC Cavity Panel Direct Fix 0.50			
							Bulk+Foil, Reflective One Side, Anti-glare Other R2.50			
							Name	Glass	Frame	
							Opening	Covering		
Window(1, 1)		2.40	0.60	1.00	0	1.44	Shading			
Wall E	3	4.40	3.10	0.70	180	6.74	ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Fixed None			
							No Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
Window		Width	Height	Eaves	Orient	Area	Fixed None			
							No Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Sliding None			
Window(3, 1)		0.60	1.50	0.70	180	0.90	No Shading			
Window(3, 2)		2.50	2.40	0.70	180	6.00	ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
Wall E	4	4.90	3.10	0.07	270	15.19	ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Sliding None			
							No Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
Wall E	8	3.90	3.10	0.03	270	10.65	ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Sliding None			
							No Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
Window		Width	Height	Eaves	Orient	Area	ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Awning None			
							No Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
Zone 7 Bedroom 1 Bedroom Area on Level 3										
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans		
	Yes	Yes	No	No	0	0	0	No		
Ceiling Penetrations	Category		Seals	Type	Clearance		Number			
	Downlight		Yes	LED	150mm		4			
Int Floor Cover						Area	Type			
						16.28	Carpet 10mm			
Ceiling	Slope					Area	Type			
	0					16.28	Insulation			
							Above Ceiling			
							Plasterboard			
							Bulk Insulation R4.00			
							Unventilated roofspace cavity			
Roof	Slope					Shape	Type	Solar Abs		
	8					Skillion	Insulation			
							Corrugated Iron	0.50		
							Bulk, Reflective Side Down, No Air Gap Above R1.30			
Internal Wall	Length	Height				Area	Type			
Wall I 1	3.70	2.70				9.99	Shaft liner party wall with plaster Reflective foil on Bulk, both			
Partition Wall	Length	Height	AdjZ			Area	Type			
Wall P 3	2.50	2.70	9			5.08	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,			
Door Int	Width	Height	AdjZ			Area	Type			
Door I(3, 1)	0.82	2.04	9			1.67	Hollow core door			
Wall P 4	1.90	2.70	11			3.46	Cavity wall, direct fix plasterboard, single gap Bulk Insulation,			
Door Int	Width	Height	AdjZ			Area	Type			
Door I(4, 1)	0.82	2.04	11			1.67	Hollow core door			
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs			
							Insulation			
Wall E 1	4.40	2.70	1.10	0	7.56	Fibro Cavity Panel on Battens		0.50		
							Bulk+Foil, Reflective One Side, Anti-glare Other R2.50			
Window		Width	Height	Eaves	Orient	Area	Name			
							Glass			
							Frame			
							Opening			
Window(1, 1)		2.40	1.80	1.10	0	4.32	Covering			
							Shading			
							ALM-006-03 A Argon Fill High Solar Gain low-E -Clear			
							Awning None			
							No Shading			

Wall E	5	3.70	2.70	0.00	270	9.99	AAC Cavity Panel Direct Fix 0.50 Bulk+Foil, Reflective One Side, Anti-glare Other R2.50												
Zone 8 Bedroom 2 Bedroom Area on Level 3																			
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans											
	Yes	Yes	No	No	0	0	0	No											
Ceiling Penetrations	Category		Seals	Type	Clearance		Number												
	Downlight		Yes	LED	150mm	4													
External Floor					Area	Covering	Type												
						Insulation													
						Under Floor													
					8.37	Carpet 10mm	Suspended Timber Floor 19mm												
						Foil Sided Bulk,	Anti-glare Down, Gap to Floor R1.50												
						Enclosed with 19mm timber	Floor Height 2700												
Int Floor Cover					Area	Type													
					3.73	Carpet 10mm													
Ceiling	Slope				Area	Type													
						Insulation													
	0					Above Ceiling													
					12.10	Plasterboard													
						Bulk Insulation R4.00													
						Unventilated roofspace cavity													
Roof	Slope		Shape		Type	Solar Abs													
						Insulation													
	8		Skillion			Corrugated Iron	0.50												
						Bulk, Reflective Side Down, No Air Gap Above R1.30													
Internal Wall	Length	Height			Area	Type													
Wall I 2	3.00	2.70			8.10	Shaft liner party wall with plaster	Reflective foil on Bulk, both												
Partition Wall	Length	Height	AdjZ		Area	Type													
Wall P 1	0.90	2.70	11		0.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,												
Door Int	Width	Height	AdjZ		Area	Type													
Door I(1, 1)	0.72	2.04	11		1.47	Hollow core door													
Wall P 2	2.50	2.70	10		6.75	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,												
Wall P 6	1.00	2.70	11		2.70	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,												
Wall P 7	1.10	2.70	11		2.97	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,												
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs												
						Insulation													
Wall E 4	4.40	2.70	0.10	180	6.63	Fibro Cavity Panel on Battens	0.50												
						Bulk+Foil, Reflective One Side, Anti-glare Other R2.50													
Window	Width	Height	Eaves	Orient	Area	Name	Glass	Frame											
						Opening	Covering												
						Shading													
Window(4, 1)	2.50	2.10	0.10	180	5.25	ALM-006-03 A	Argon Fill High Solar Gain low-E -Clear	ALM-006 AI											
						Awning	None												
						No Shading													
Wall E 5	1.90	2.70	0.00	270	5.13	AAC Cavity Panel Direct Fix 0.50 Bulk+Foil, Reflective One Side, Anti-glare Other R2.50													
Zone 9 En suite 1 Night Time Area on Level 3																			
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans											
	Yes	No	No	No	0	0	1	No											
Ceiling Penetrations	Category		Seals	Type	Clearance		Number												
	Downlight		Yes	LED	150mm	1													
	Ex. Fan(Ceil)		Yes		300mm	1													
Int Floor Cover					Area	Type													
					3.75	Ceramic Tiles 8mm													
Ceiling	Slope				Area	Type													
						Insulation													
	0					Above Ceiling													
					3.75	Plasterboard													
						Bulk Insulation R4.00													
						Unventilated roofspace cavity													
Roof	Slope		Shape		Type	Solar Abs													
						Insulation													
	8		Skillion			Corrugated Iron	0.50												
						Bulk, Reflective Side Down, No Air Gap Above R1.30													
Internal Wall	Length	Height			Area	Type													

Wall I	1	1.50	2.70			4.05	Shaft liner party wall with plaster	Reflective foil on Bulk, both
Partition Wall	Length	Height		AdjZ	Area	Type		
Wall P	1	2.50	2.70		7	5.08	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Door Int	Width	Height		AdjZ	Area	Type		
Door I(1, 1)	0.82	2.04		7	1.67	Hollow core door		
Wall P	3	2.50	2.70		10	6.75	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Wall P	4	1.50	2.70		11	4.05	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs	
						Insulation		
Zone10	Bath	Unconditioned Area on Level 3						
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans
	Yes	Yes	No	No	0	0	1	No
Ceiling Penetrations	Category	Seals	Type	Clearance	Number			
	Downlight	Yes	CFL	160mm	1			
	Ex. Fan(Ceil)	Yes		300mm	1			
Int Floor Cover				Area	Type			
				3.75	Ceramic Tiles 8mm			
Ceiling		Slope		Area	Type			
					Insulation			
					Above Ceiling			
		0		3.75	Plasterboard			
					Bulk Insulation R4.00			
					Unventilated roofspace cavity			
Roof		Slope	Shape	Type	Solar Abs			
				Insulation				
		8	Skillion	Corrugated Iron	0.50			
					Bulk, Reflective Side Down, No Air Gap Above R1.30			
Internal Wall	Length	Height		Area	Type			
Wall I	1	1.50	2.70		4.05	Shaft liner party wall with plaster	Reflective foil on Bulk, both	
Partition Wall	Length	Height		AdjZ	Area	Type		
Wall P	1	2.50	2.70		9	6.75	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Wall P	3	2.50	2.70		8	6.75	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Wall P	4	1.50	2.70		11	2.58	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Door Int	Width	Height		AdjZ	Area	Type		
Door I(4, 1)	0.72	2.04		11	1.47	Hollow core door		
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs	
						Insulation		
Zone11	Stair	Day Time	Area on Level 3					
Air Movement	Screens	Seals	Chimney	Gas vent	Wall vents	Downlights	Ex Fans	Ceilin fans
	Yes	Yes	No	No	0	0	0	No
Ceiling Penetrations	Category	Seals	Type	Clearance	Number			
	Downlight	Yes	LED	150mm	2			
Void	Area	To Zone						
Void 1	2.16	6						
Int Floor Cover				Area	Type			
				6.81	Carpet 10mm			
Ceiling		Slope		Area	Type			
					Insulation			
					Above Ceiling			
		0		6.80	Plasterboard			
					Bulk Insulation R4.00			
					Unventilated roofspace cavity			
Roof		Slope	Shape	Type	Solar Abs			
				Insulation				
		8	Skillion	Corrugated Iron	0.50			
					Bulk, Reflective Side Down, No Air Gap Above R1.30			
Internal Wall	Length	Height		Area	Type			
Partition Wall	Length	Height		AdjZ	Area	Type		
Wall P	1	1.90	2.70		7	3.46	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Door Int	Width	Height		AdjZ	Area	Type		
Door I(1, 1)	0.82	2.04		7	1.67	Hollow core door		
Wall P	2	1.50	2.70		9	4.05	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Wall P	3	1.50	2.70		10	2.58	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Door Int	Width	Height		AdjZ	Area	Type		
Door I(3, 1)	0.72	2.04		10	1.47	Hollow core door		

Wall P 4	0.90	2.70		8	0.96	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Door Int	Width	Height		AdjZ	Area	Type	
Door I(4, 1)	0.72	2.04		8	1.47	Hollow core door	
Wall P 5	1.10	2.70		8	2.97	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
Wall P 6	1.00	2.70		8	2.70	Cavity wall, direct fix plasterboard, single gap	Bulk Insulation,
External Wall	Length	Height	Eaves	Orient	Area	Type	Abs
						Insulation	
Wall E 7	4.10	2.70	0.00	270	11.07	AAC Cavity Panel Direct Fix	0.50
						Bulk+Foil, Reflective One Side, Anti-glare Other	R2.50

Reference Dwelling D1- SRS20082
Appendix D Minimum required glazing

Window Schedule

Level	Room	Height	Width	Frame	Glazing	U	SHGC
GL	Bedroom	2400	2500	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
L1	Living (S)	2400	2500	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
	Living	600	2400	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
	Study	600	2400	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
L2	Living(S)	1500	600	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
	Living(N)	600	2400	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
	Bedroom 2	2100	2500	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52
	Bedroom 1	1800	2400	Aluminium	Double glaze,Argon fill,High solar gain,Low emmissivity glaze	4.1	0.52

82 – 90 JOHNS ROAD, PROSPECT SA 5082

CLIENT NAME	82 JOHNS ROAD PTY LTD	BUILDER	BERT FARINA CONSTRUCTIONS
PROJECT	FRONT TOWNHOUSES – DRAWING SET A – STAGE A	ENGINEER	TMK ENGINEERING & TRUESTEEL FRAMES
REVISION	D	CERTIFIER	KATNICH DODD – VIC BARONE

GENERAL NOTES:
GEMMA LEA DESIGN STUDIO HEREBY TAKES NO RESPONSIBILITY FOR ANY STRUCTURAL DESIGN OR DETAILS IF CHANGES OR ALTERATIONS ARE MADE TO THE PLANS DURING OR PRIOR TO CONSTRUCTION WITHOUT WRITTEN NOTICE OR APPROVAL.

BUILDER TO REQUEST COUNCIL’S FULL DEVELOPMENT BUILDING APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION.

BUILDER/CONTRACTOR IS RESPONSIBLE TO CHECK AND CONFIRM ALL DRAWINGS AND DETAILS PRIOR TO ORDERING ANY MATERIAL AND OR QUOTING OF PROJECT AND OR COMMENCEMENT OF ANY CONSTRUCTION. GEMMA LEA DESIGN STUDIO DO NOT ACCEPT ANY RESPONSIBILITY FOR ERRORS AND OR OMISSIONS.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, DOCUMENTS, SCHEDULES AND SPECIFICATIONS PRIOR TO ANY WORK ON SITE IS CONDUCTED.

DO NOT SCALE OFF THE PLANS, FIGURED DIMENSIONS TO TAKE PRECEDENCE OVER SCALED DRAWINGS.

ALL SANITARY, PLUMBING, DRAINAGE AND ELECTRICAL WORK TO BE CARRIED OUT BY FULLY QUALIFIED AND LICENSED TRADESPERSONS.

REFER TO ENGINEER’S DESIGN, DOCUMENTATION, CALCULATION AND SPECIFICATION FOR STRUCTURAL, ELECTRICAL, HYDRAULIC AND CIVIL DETAILS (IF APPLICABLE).

ALL LINTELS AS PER ENGINEER’S AND OR BUILDING SPECIFICATION DETAILS.

BOUNDARY/SURVEY/SETOUT:
ARCHITECTURALS BY GEMMA LEA DESIGN STUDIO IS INDICATIVE FOR BUILDING SET OUT PURPOSE ONLY. PRIOR TO ANY CONSTRUCTION REFER TO SURVEYOR DRAWINGS AND ENGINEERING CIVIL PLAN FOR SITE LEVELS, CONTOUR, BENCH MARKS, SERVICE LOCATIONS. BUILDER TO ORGANISE A CERTIFIED SURVEY PRIOR TO ANY CONSTRUCTION IS COMMENCED. BUILDER TO CHECK AND CONFIRM ALL SITE AND SET OUT DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. PLANS TO BE READ IN CONJUNCTION WITH THE INGERS AND SURVEYER’S DRAWINGS/DETAILS. BUILDER TO CONFIRM ENGINEER DRAWINGS ARE UPDATED.

TERMITE TREATMENT NOTE:
TERMITE PROTECTION SHALL COMPLY WITH AS3660.1-2014, PROVIDE CERTIFICATE IN ACCORDANCE WITH AS3660.1-2014 STATING METHOD OF APPLICATION AND CERTIFICATE OF COMPLETION.

RAINWATER NOTE:
1KL RWT COLLECTION, PLUMBED TO EITHER A TOILET, HOT WATER SYSTEM OR LAUNDRY COLD WATER OUTLETS, RWT MUST BE FITTED WITH OVERFLOW DEVICE. INLET AND OVERFLOW MUST BE FITTED WITH MOSQUITO-PROOF SCREENS, MUST COMPLY WITH BCA REQUIREMENTS.

STORMWATER NOTE:
REFER TO ENGINEER’S CIVIL PLAN FOR ALL LEVELS, RETAINING WALLS AND STORMWATER DRAINAGE PLAN.

WET AREA NOTE:
WET AREA CONSTRUCTION, WATERPROOFING AND TILING SHALL COMPLY WITH MINISTERS SPEC SA F1.7, AS3740, PART 3.8.1 AND SA 3 OF VOL 2.

PROVIDE OVERFLOW DEVICES TO ALL PLUMBING FIXTURES WHERE NOT PROVIDING FLOOR WASTE IN ACCORDANCE WITH SA F1.7

WALL MEMBRANES
PLIABLE BUILDING MEMBRANES TO COMPLY WITH AS4200 AND INSTALLED ON EXTERIOR SIDE OF PRIMARY INSULATION LAYER.

ENERGY SPECIFICATION:
REFER TO INDEPENDENT ENERGY EFFICIENCY REPORT FOR ALL INSULATION AND GLAZING REQUIREMENTS.

EXHAUST FANS SERVING A CONDITIONED SPACE OR A HABITABLE ROOM BE FITTED WITH SELF CLOSING DEVICE SUCH AS SELF CLOSING DAMPER.

ALL EXHAUST FANS TO BE VENTED TO THE OUTSIDE. WC AND LAUNDRY EXHAUST FANS TO BE CONNECTED TO WC LIGHT SWITCHES

REMOVABLE HINGE NOTE:
WC DOOR HAVING DEMOUNTABLE HINGES AN BE REMOVABLE FROM OUTSIDE THE WC. TO COMPLY WITH BCA PART 2 2.43 & 3.8.3.

TIMBER FRAMING:
ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH AS 1684.2-2010 (RESIDENTIAL TIMBER FRAMED CONSTRUCTION) ALL EXPOSED TIMBER MEMBERS AND FIXINGS ARE TO BE ADEQUATELY TREATED WITH PRESERVATIVE IN ACCORDANCE WITH AS 1604.

ROOF NOTE:
ROOF CONTRACTOR SHALL PROVIDE ALL NECESSARY FLASHINGS, CAPPINGS AND OTHER ITEMS REQUIRED TO MAKE THE ROOF WATERTIGHT AND COMPLETE.

ELECTRICAL NOTE:
ALL ELECTRICAL WORK CARRIED OUT TO BE IN ACCORDANCE WITH AS 3000.

SMOKE ALARM SYSTEM TO COMPLY WITH AS3786 ALL TO BE INTERCONNECTED AND POWERED FROM THE CONSUMER MAINS WITH 9V BATTERY BACKUP. SMOKE DETECTION SYSTEM TO COMPLY WITH AS1670 AND THE BCA REQUIREMENTS.

WINDOW AND DOORS NOTE:
ALL GLAZING TO COMPLY WITH AS 1288-2006 ALL GLAZING IS TO BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH AS 1288.1

ALL CARE HAS BEEN TAKEN, BUT IT IS THE BUILDER’S RESPONSIBILITY TO CHECK AND VERIFY ALL WINDOWS AND DOOR DIMENSIONS PRIOR TO CONSTRUCTION AND ORDERS AS NO RESPONSIBILITY CAN BE ACCEPTED FOR ANY ERRORS OR OMISSIONS.

FIRST FLOOR OPENING – ALL BEDROOM WINDOW OPENINGS BELOW 1700mm AFL TO FIRST FLOOR BE RESTRICTED AND HAVE A MAXIMUM OPENING OF NOT MORE THAN 125mm.

PROVIDE OBSCURE GLAZING TO WET AREA WINDOWS – BATHROOM, ENSUITE, WC ETC.

SKYLIGHTS BETWEEN ROOF FRAMING RAFTERS/TRUSSES TO BE DETERMINED ON SITE, INSTALLED AS PER MANUF. RECOMMENDATIONS.

AC & PLUMBING STACK NOTE:
BUILDER TO CONFIRM LOCATIONS OF ALL AC DUCT VOIDS AND PLUMBING STACKS PRIOR TO ANY CONSTRUCTION COMMENCING.

STAIRS NOTE:
STAIRS TO BE CONSTRUCTION IN STRICT ACCORDANCE WITH THE BCA AT MAXIMUM 18 RISERS TO EACH FLIGHT. STAIRS TO HAVE A NON-FLIP FINISH OR SUITABLE NON-SKID STRIP.

BALUSTRADE TO COMPLY WITH BCA PART 3.9.2 WITH HEIGHT NO LESS THAN 900mm ABOVE STAIR TREAD NOSING AND NO LESS THAN 1000mm ABOVE FINISHED FLOOR OR BALCONY.

A.LEGEND	
KEY	DESCRIPTION
RBW	RENDERED BLOCK WALL
SB-1	1000mm HIGH VERTICAL STEEL BALUSTRADE TO BALCONIES
SB-2	1400mm HIGH VERTICAL SLAT FENCING TO FRONT FENCES
SB-3	1800mm HIGH HORIZONTAL SLAT FENCE SCREENING TO REAR OF TOWNHOUSES / CAR SPACES
TS	VERTICAL TIMBER SCREENING, PAINTED BROWN/TIMBER COLOUR TO MATCH FRONT TIMBER DOOR
WT.2	RENDERED HEBEL WALL
WT.3	RENDERED CEMENT FIBRE CLADDING FIXED TO FRAMING
WT.7	SCYON STRIA VERTICAL CLADDING, PAINTED TO SELECTION

A.SHEET LIST		
NO.	SHEET NAME	REV
WD.A.100	COVER – 3 STOREY TOWNHOUSES	D
WD.A.101	GROUND FLOOR PLAN	D
WD.A.102	FIRST FLOOR PLAN	D
WD.A.103	SECOND FLOOR & ROOF PLAN	D
WD.A.104	ELEVATIONS	D
WD.A.105	SECTIONS 01	
WD.A.106	SECTIONS 02	PD3
WD.A.107	DETAILS 01	
WD.A.108	DETAILS 02	

WINDOW SCHEDULE – 3 STOREY HOMES						
TOWNHOUSE		TAG	HEIGHT	WIDTH	QUANTITY	NOTES
1803A13 82JR ALLOTMENT 204	W.01	600	2400	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 204	W.01 F	600	2400	2		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 204	W.02	1500	600	1		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 204	W.03	1500	2400	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 204	W.04	2100	2500	1		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS

1803A13 82JR ALLOTMENT 205, 207, 209	W.01	600	2400	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 205, 207, 209	W.02	1500	600	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 205, 207, 209	W.03	1500	2400	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 205, 207, 209	W.04	2100	2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS

1803A13 82JR ALLOTMENT 206, 208, 210	W.01	600	2400	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 206, 208, 210	W.02	1500	600	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 206, 208, 210	W.03	1500	2400	3		SINGLE GLAZING (MINIMUM) TO THIS WINDOW
1803A13 82JR ALLOTMENT 206, 208, 210	W.04	2100	2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS

1803A13 82JR ALLOTMENT 211	W.01	600	2400	3		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 211	W.01 F	600	2400	2		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 211	W.02	1500	600	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 211	W.03	1500	2400	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS
1803A13 82JR ALLOTMENT 211	W.04	2100	2500	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS

DOOR SCHEDULE – 3 STOREY HOMES						
TOWNHOUSE		TAG	HEIGHT x WIDTH	QUANTITY	NOTES	
1803A13 82JR ALLOTMENT 204	D.01	2100 x 820 eXT	2		ENTRY DOOR – SOLID TIMBER – PRIMED	
1803A13 82JR ALLOTMENT 204	D.02	2100 x 720	3		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 204	D.03	2100 x 820	4		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 204	D.06	2100 x 720	1		INTERNAL CAVITY SLIDER – HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 204	D.07	2400 x 2500	1		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 204	D.08	2100 x 2500	1		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 204	D.09	2200 x 2400	1		ROLLER DOOR – AUTOMATED	

1803A13 82JR ALLOTMENT 205, 207, 209	D.01	2100 x 820 eXT	6		ENTRY DOOR – SOLID TIMBER – PRIMED	
1803A13 82JR ALLOTMENT 205, 207, 209	D.02	2100 x 720	9		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 205, 207, 209	D.03	2100 x 820	12		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 205, 207, 209	D.06	2100 x 720	3		INTERNAL CAVITY SLIDER – HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 205, 207, 209	D.07	2400 x 2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 205, 207, 209	D.08	2100 x 2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 205, 207, 209	D.09	2200 x 2400	3		ROLLER DOOR – AUTOMATED	

1803A13 82JR ALLOTMENT 206, 208, 210	D.01	2100 x 820 eXT	6		ENTRY DOOR – SOLID TIMBER – PRIMED	
1803A13 82JR ALLOTMENT 206, 208, 210	D.02	2100 x 720	9		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 206, 208, 210	D.03	2100 x 820	12		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 206, 208, 210	D.06	2100 x 720	3		INTERNAL CAVITY SLIDER – HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 206, 208, 210	D.07	2400 x 2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 206, 208, 210	D.08	2100 x 2500	3		ALUMINIUM FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 206, 208, 210	D.09	2200 x 2400	3		ROLLER DOOR – AUTOMATED	

1803A13 82JR ALLOTMENT 211	D.01	2100 x 820 eXT	2		ENTRY DOOR – SOLID TIMBER – PRIMED	
1803A13 82JR ALLOTMENT 211	D.02	2100 x 720	3		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 211	D.03	2100 x 820	4		INTERNAL HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 211	D.06	2100 x 720	1		INTERNAL CAVITY SLIDER – HOLLOWCORE PRIMED DOOR	
1803A13 82JR ALLOTMENT 211	D.07	2400 x 2500	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 211	D.08	2100 x 2500	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	
1803A13 82JR ALLOTMENT 211	D.09	2200 x 2400	1		FRAMED, DOUBLE GLAZED, ARGON FILLED GLAZING TO ENERGY EFFICIENCY REPORT DETAILS	

REVISIONS		
ISSUE #	DATE	DESCRIPTION
PD3	05/11/2019	ISSUE FOR PLANNING VARIATION TO COUNCIL
PD4	05/02/2020	RESPONSE TO REFERRALS FROM COUNCIL
D	27/05/2020	REVISION TO STAGE A FOR ENGINEERING

AUTHOR	GB
REVISION DESCRIPTION	REVISION TO STAGE A FOR ENGINEERING

CLIENT
82 JOHNS ROAD PTY LTD

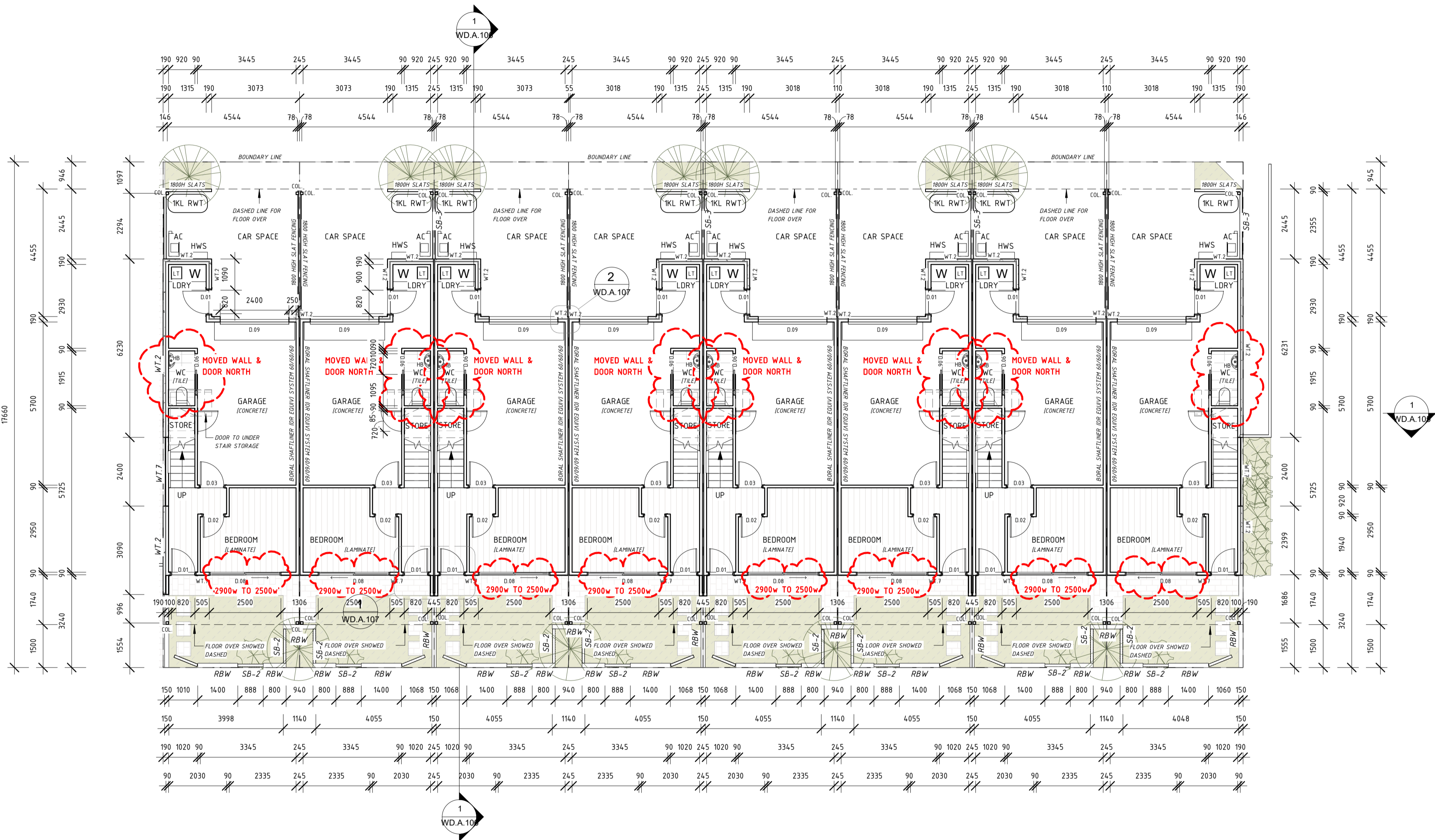


PROJECT ADDRESS
82 – 90 JOHNS ROAD, PROSPECT SA 5082



SHEET TITLE
COVER – 3 STOREY TOWNHOUSES

REVISION	ISSUE DATE	SHEET NUMBER
D	27/05/2020	WD.A.100



1 A-GROUND FLOOR
1 : 100



A.LEGEND	
KEY	DESCRIPTION
RBW	RENDERED BLOCK WALL
SB-1	1000mm HIGH VERTICAL STEEL BALUSTRADE TO BALCONES
SB-2	1400mm HIGH VERTICAL SLAT FENCING TO FRONT FENCES
SB-3	1800mm HIGH HORIZONTAL SLAT FENCE SCREENING TO REAR OF TOWNHOUSES / CAR SPACES
TS	VERTICAL TIMBER SCREENING, PAINTED BROWN/TIMBER COLOUR TO MATCH FRONT TIMBER DOOR
WT.2	RENDERED HEBEL WALL
WT.3	RENDERED CEMENT FIBRE CLADDING FIXED TO FRAMING
WT.7	SCYON STRIA VERTICAL CLADDING, PAINTED TO SELECTION

REVISIONS	
ISSUE #	DATE
PD3	05/11/2019
PD4	05/02/2020
D	27/05/2020

AUTHOR
GB

REVISION DESCRIPTION
REVISION TO STAGE A FOR ENGINEERING

CLIENT
82 JOHNS ROAD PTY LTD



PROJECT ADDRESS
82 - 90 JOHNS ROAD, PROSPECT SA 5082

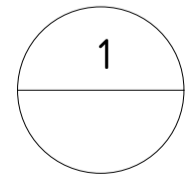
FOR CONSTRUCTION

SHEET TITLE
GROUND FLOOR PLAN

REVISION
D

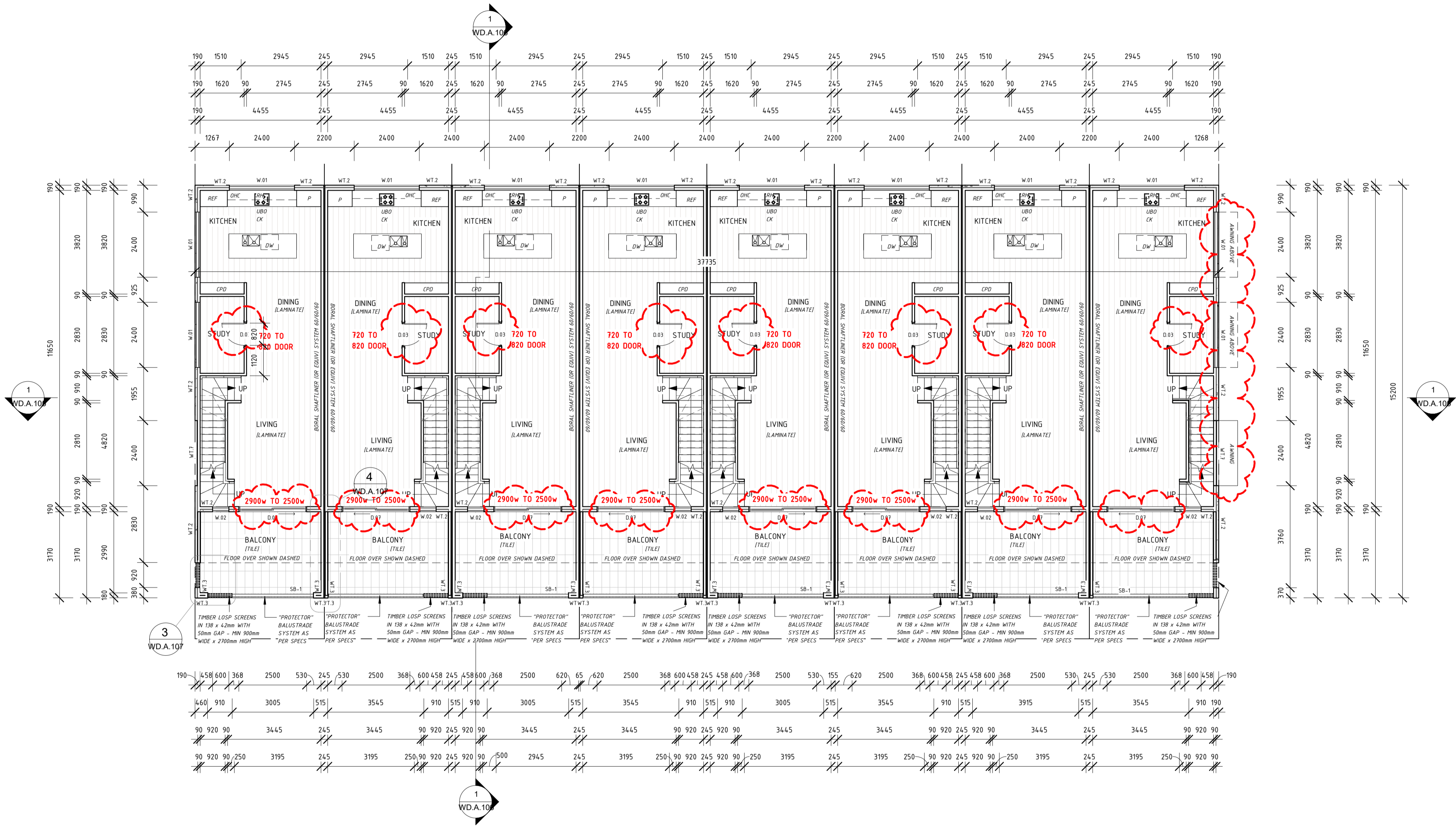
ISSUE DATE
27/05/2020

SHEET NUMBER
WD.A.101



A-FIRST FLOOR

1 : 100



A.LEGEND

KEY	DESCRIPTION
RBW	RENDERED BLOCK WALL
SB-1	1000mm HIGH VERTICAL STEEL BALUSTRADE TO BALCONIES
SB-2	1400mm HIGH VERTICAL SLAT FENCING TO FRONT FENCES
SB-3	1800mm HIGH HORIZONTAL SLAT FENCE SCREENING TO REAR OF TOWNHOUSES / CAR SPACES
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REVISIONS		
ISSUE #	DATE	DESCRIPTION
0	27/05/2020	REVISION TO STAGE A FOR ENGINEERING

AUTHOR
GB

CLIENT
82 JOHNS ROAD PTY LTD

REVISION DESCRIPTION
REVISION TO STAGE A FOR ENGINEERING

CITIFY



PROJECT ADDRESS
82 - 90 JOHNS ROAD, PROSPECT SA 5082

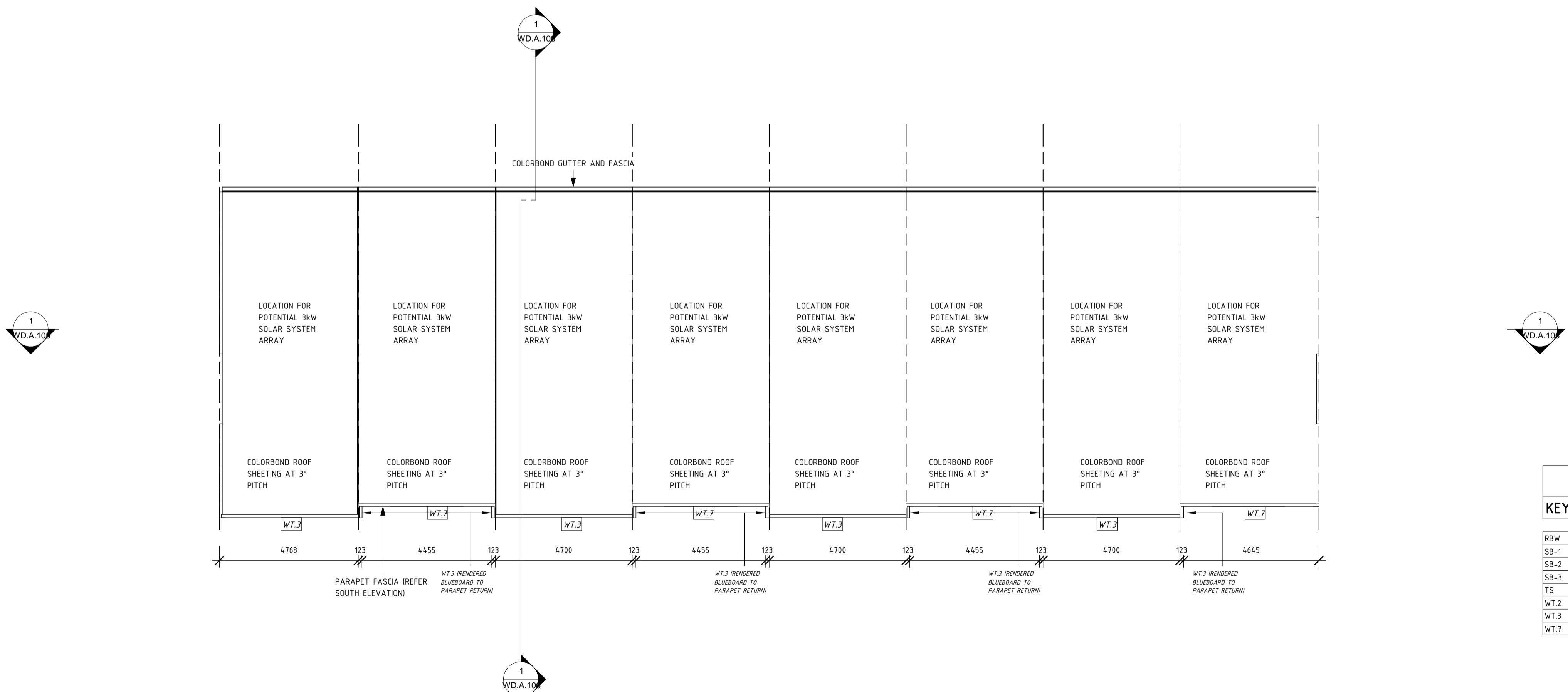
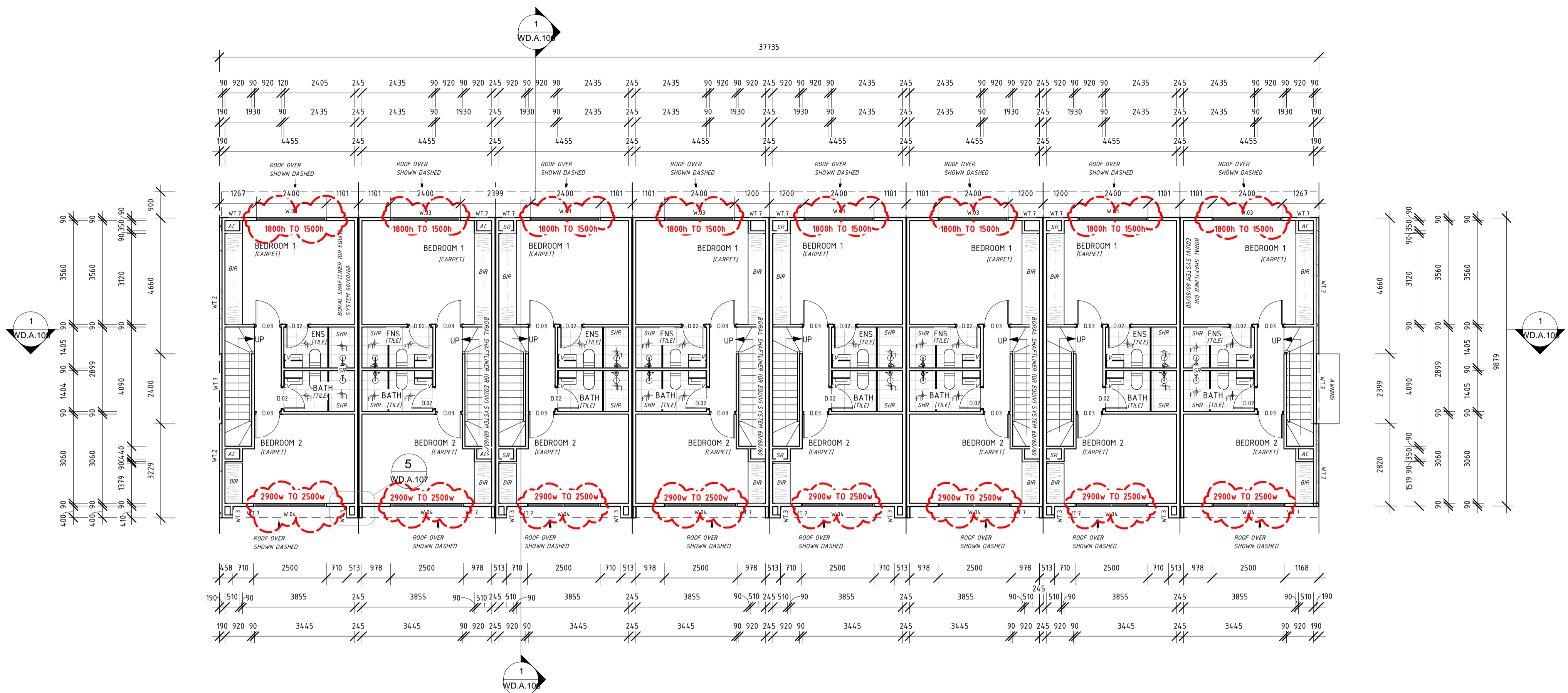
FOR CONSTRUCTION

SHEET TITLE
FIRST FLOOR PLAN

REVISION
D

ISSUE DATE
27/05/2020

SHEET NUMBER
WD.A.102



A.LEGEND	
KEY	DESCRIPTION
RBW	RENDERED BLOCK WALL
SB-1	1000mm HIGH VERTICAL STEEL BALUSTRADE TO BALCONIES
SB-2	1400mm HIGH VERTICAL SLAT FENCING TO FRONT FENCES
SB-3	1800mm HIGH HORIZONTAL SLAT FENCE SCREENING TO REAR OF TOWNHOUSES / CAR SPACES
TS	VERTICAL TIMBER SCREENING, PAINTED BROWN/TIMBER COLOUR TO MATCH FRONT TIMBER DOOR
WT.2	RENDERED HEBEL WALL
WT.3	RENDERED CEMENT FIBRE CLADDING FIXED TO FRAMING
WT.7	SCYON STRIA VERTICAL CLADDING, PAINTED TO SELECTION

REVISIONS		
ISSUE	DATE	DESCRIPTION
0	21/05/2020	REVISION TO STAGE A FOR ENGINEERING

AUTHOR: GB
CLIENT: 82 JOHNS ROAD PTY LTD

REVISION DESCRIPTION
REVISION TO STAGE A FOR ENGINEERING

CLIENT: 82 JOHNS ROAD PTY LTD

CITIFY



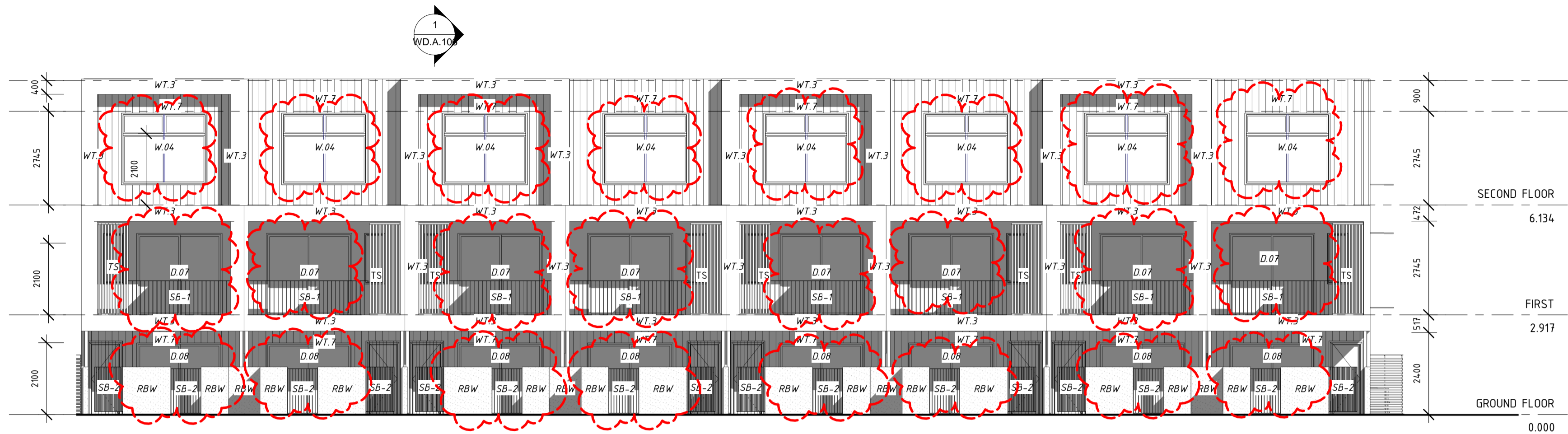
PROJECT ADDRESS
82 - 90 JOHNS ROAD, PROSPECT SA 5082

FOR CONSTRUCTION

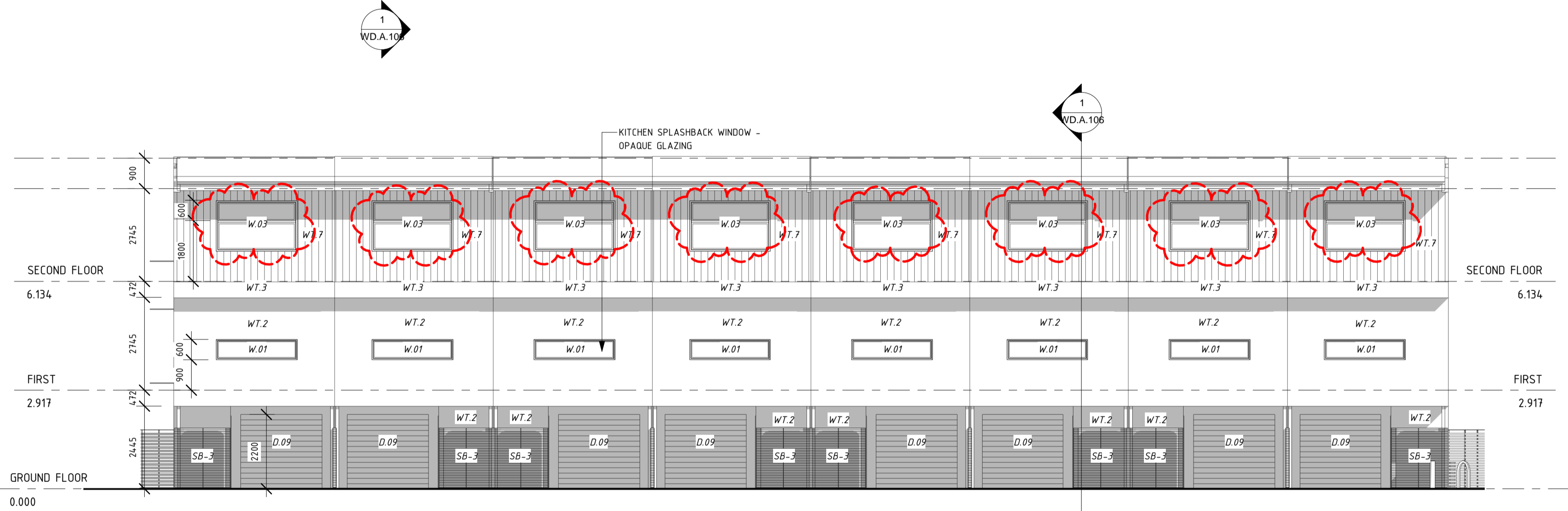
SHEET TITLE
SECOND FLOOR & ROOF PLAN

REVISION: D
ISSUE DATE: 27/05/2020

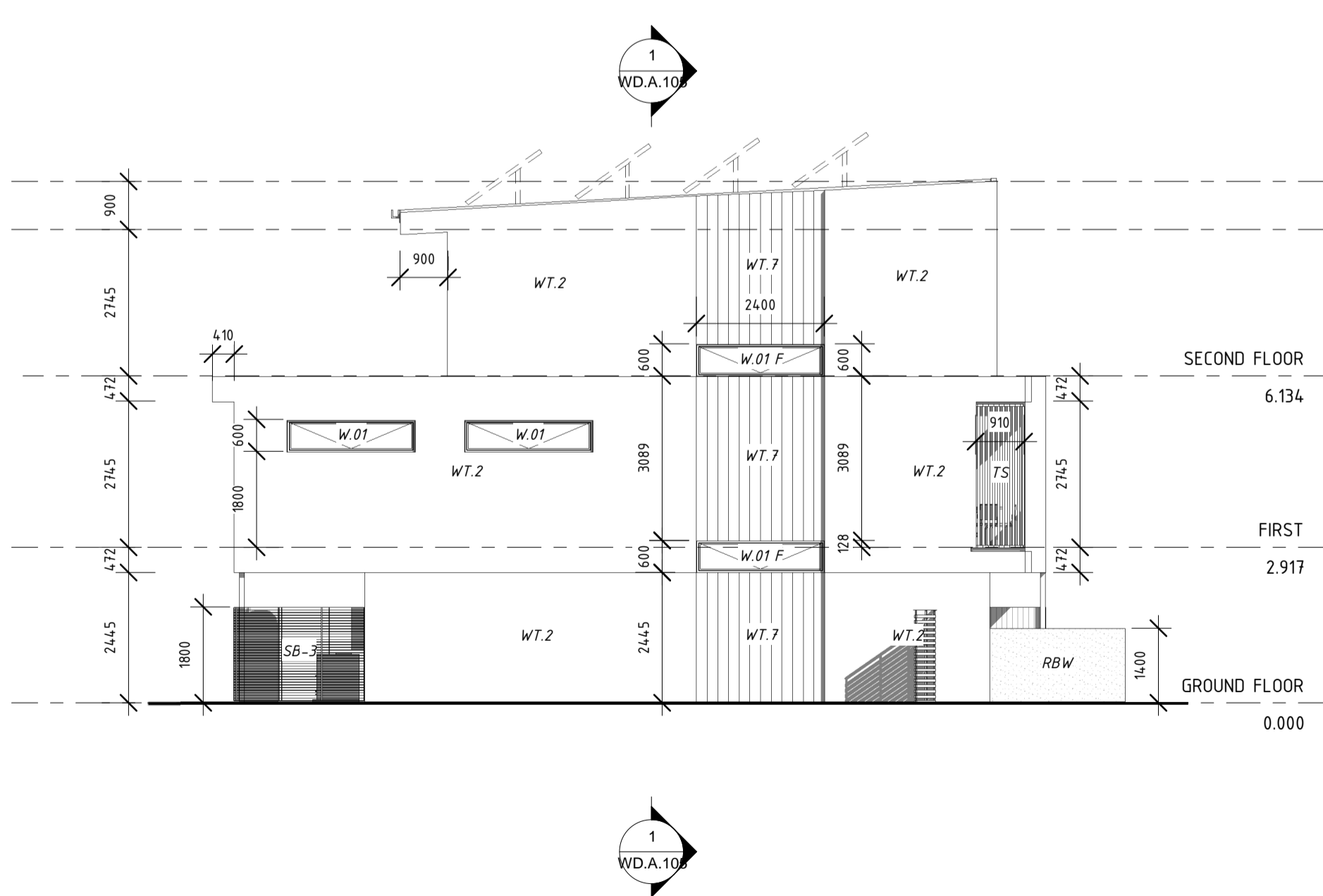
SHEET NUMBER
W.D.A.103



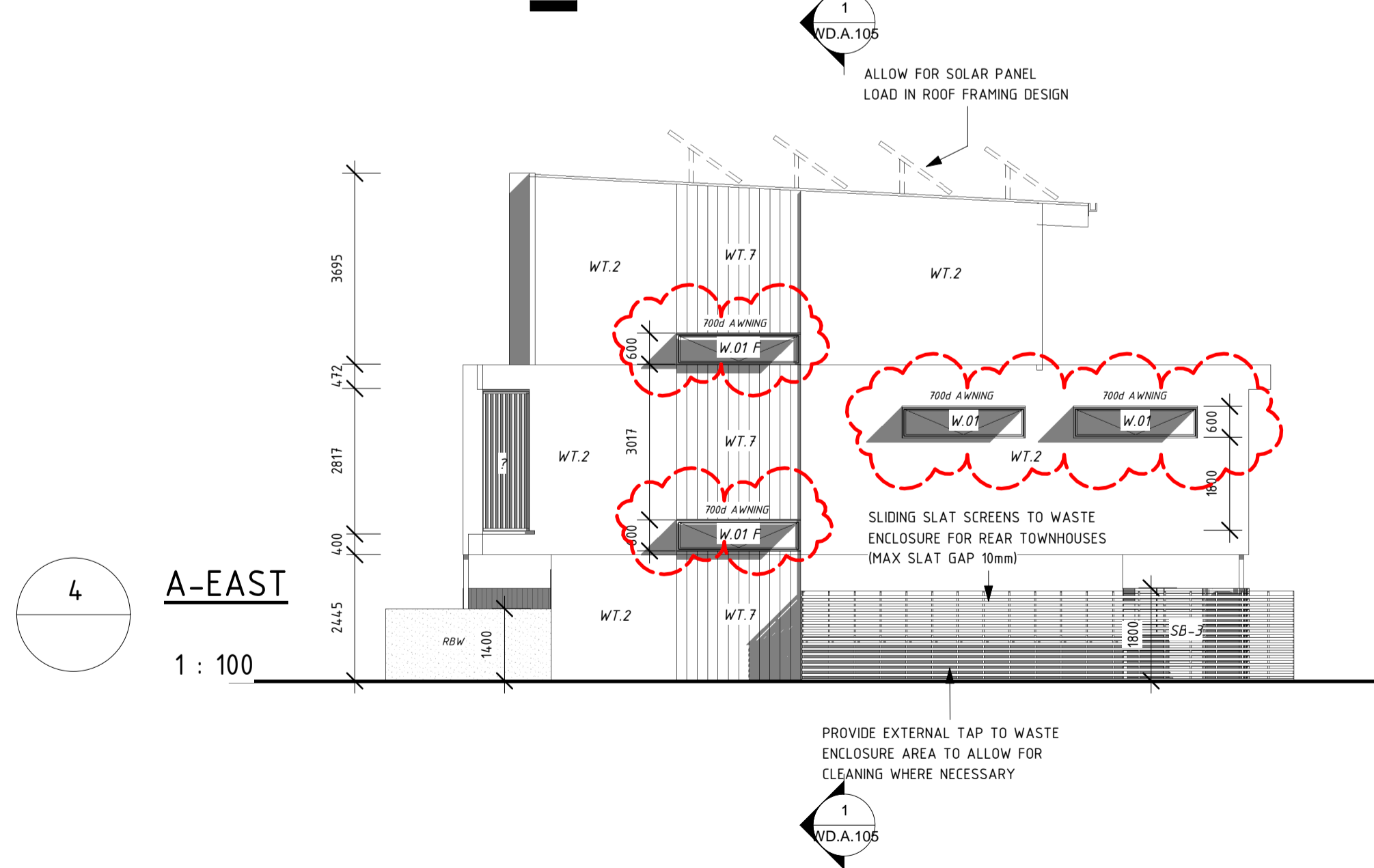
1 A-SOUTH
1 : 100



2 A-NORTH
1 : 100



3 A-WEST
1 : 100



4 A-EAST
1 : 100

A.LEGEND	
KEY	DESCRIPTION
RBW	RENDERED BLOCK WALL
SB-1	1000mm HIGH VERTICAL STEEL BALUSTRADE TO BALCONIES
SB-2	1400mm HIGH VERTICAL SLAT FENCING TO FRONT FENCES
SB-3	1800mm HIGH HORIZONTAL SLAT FENCE SCREENING TO REAR OF TOWNHOUSES / CAR SPACES
TS	VERTICAL TIMBER SCREENING, PAINTED BROWN/TIMBER COLOUR TO MATCH FRONT TIMBER DOOR
WT.2	RENDERED HEBEL WALL
WT.3	RENDERED CEMENT FIBRE CLADDING FIXED TO FRAMING
WT.7	SCYON STRIA VERTICAL CLADDING, PAINTED TO SELECTION



REVISIONS		
ISSUE	DATE	DESCRIPTION
PD3	05/11/2019	ISSUE FOR PLANNING VARIATION TO COUNCIL
PD4	05/02/2020	RESPONSE TO REFERRALS FROM COUNCIL
PD5	17/03/2020	RESOLVE RESERVED MATTER
D	27/05/2020	REVISION TO STAGE A FOR ENGINEERING