

Nationwide House Energy Rating Scheme

NatHERS Certificate No. #HR-UMOU10-02

Generated on 12 Dec 2022 using Hero 3.0.1

Property

Address 29 Reddall Street, MANLY, NSW, 2095
Lot/DP
NCC Class* 1a
Type New

Plans

Main Plan Project No. 22020
Prepared by Wolski Coppin Architecture

Construction and environment

Assessed floor area (m ²)*	Exposure Type
Conditioned*	283.1 Open
Unconditioned*	51.1 NatHERS climate zone
Total	463.2 56 - Mascot AMO
Garage	129.0



Accredited assessor

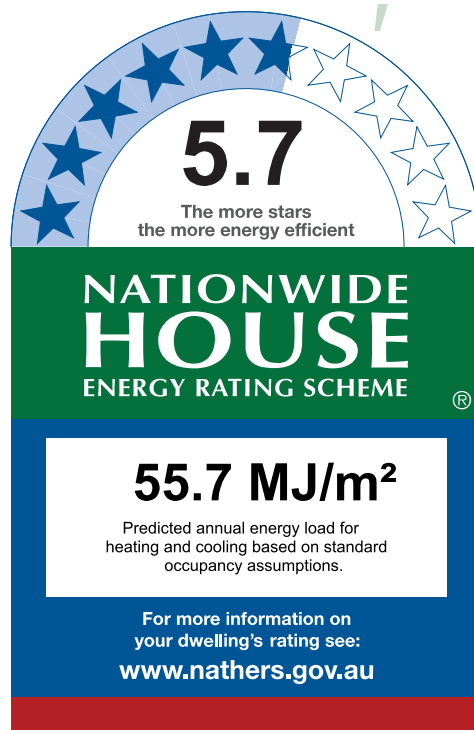
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Assessor Accrediting Organisation DMN
Declaration of interest No Conflict of Interest

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
37.4	18.3
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 <http://www.hero-software.com.au/pdf/HR-UMOU10-02>. When using either link, ensure you are visiting <http://www.hero-software.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?

Window and glazed door type and performance

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
ALM-003-03 A	Aluminium A DG Air Fill High Solar Gain low-E -Clear	4.30	0.47	0.45	0.49
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -Clear	4.30	0.53	0.50	0.56

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bathroom	ALM-004-03 A	WG02	1500	340	Fixed	0	SW	None
Bedroom 02	ALM-004-03 A	WG08	2400	3850	Sliding	60	NE	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bedroom 03	ALM-004-03 A	WG09	2400	4250	Sliding	50	NE	None
Bedroom 03	ALM-004-03 A	WG10	2400	4457	Sliding	58	NW	None
Ensuite	ALM-004-03 A	WL03	1200	600	Awning	90	SW	None
Ensuite	ALM-004-03 A	WG07	1500	900	Awning	90	SE	None
Foyer	ALM-004-03 A	WG03	2400	2190	Casement	47	SW	None
Guest WC	ALM-004-03 A	WL06	1600	900	Fixed	0	SE	None
Guest WC	ALM-004-03 A	WL05	1600	490	Fixed	0	SW	None
Indoor Outdoor Living	ALM-004-03 A	WG11	2400	2185	Sliding	45	NE	None
Indoor Outdoor Living	ALM-004-03 A	WG12	2400	5400	Sliding	58	NW	None
Kitchen/Living	ALM-004-03 A	WL10	2400	6800	Sliding	60	NE	None
Kitchen/Living	ALM-004-03 A	WL09	2400	1812	Sliding	45	NW	None
Kitchen/Living	ALM-004-03 A	WL08	2400	4027	Sliding	60	NE	None
Kitchen/Living	ALM-004-03 A	WR03	415	4800	Fixed	0	SE	None
Kitchen/Living	ALM-004-03 A	WL12	2400	3195	Sliding	45	NW	None
Kitchen/Living	ALM-004-03 A	WL11	2400	2700	Sliding	60	SW	None
Kitchen/Living	ALM-004-03 A	WR04	415	4800	Fixed	0	NW	None
Kitchen/Living	ALM-004-03 A	WR02	370	8870	Fixed	0	SW	None
Kitchen/Living	ALM-004-03 A	WR01	630	2870	Fixed	0	SW	None
Laundry	ALM-004-03 A	WG05	2400	900	Casement	90	SE	None
Laundry	ALM-004-03 A	WG04	1200	490	Fixed	0	SW	None
Master Bedroom	ALM-004-03 A	WL01	1200	600	Awning	90	SW	None
Master Bedroom	ALM-004-03 A	WL02	1200	600	Awning	90	SW	None
Master Bedroom	ALM-003-03 A	WL14	2400	2120	Awning	20	NW	None
Master Bedroom	ALM-004-03 A	WL13	2400	2960	Sliding	47	NE	None
Staircase Base	ALM-004-03 A	WG06	2400	2990	Fixed	0	SE	None
Study/Bedroom 04	ALM-004-03 A	WG01	2400	2400	Sliding	60	SW	None
Study/Bedroom 04	ALM-004-03 A	WG13	1500	600	Awning	90	NW	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Study/Bedroom 04	ALM-004-03 A	WG14	1500	600	Awning	90	NW	None
Foyer	ALM-004-03 A	WL04	2400	1259	Fixed	0	SW	None
Staircase Base	ALM-004-03 A	WL07	2400	2990	Fixed	0	SE	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage	2400	2940	90	SE

External wall type

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
BV-REFL-CAV	Brick Veneer Stud Wall with Reflective Sarking	0.30	Light	2.50	Yes
CONCBLOCK-190-FCF-PB	Concrete Block 190mm Fully Core-Filled - Plasterboard Internally	0.30	Light	0.00	No
FC-REFL-CAV	Fibre-Cement Clad Battened (Refl Cavity) Stud Wall	0.30	Light	2.50	Yes

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bathroom	BV-REFL-CAV	2822	1733	SW	101	Yes
Bathroom	BV-REFL-CAV	2822	1134	SE	922	Yes
Bedroom 02	FC-REFL-CAV	2822	3870	NE	1294	Yes
Bedroom 02	BV-REFL-CAV	2822	4518	SE		Yes
Bedroom 02	BV-REFL-CAV	2822	746	NE	1150	Yes
Bedroom 03	FC-REFL-CAV	2822	4250	NE	1286	Yes
Bedroom 03	FC-REFL-CAV	2822	4457	NW	2824	Yes
Communications Room	CONCBLOCK-190-FCF-PB	3264	3243	SW		No
Downstairs	CONCBLOCK-190-FCF-PB	3264	3301	SE		No
Ensuite	FC-REFL-CAV	2822	120	SE		Yes
Ensuite	FC-REFL-CAV	2822	2170	SW		Yes
Ensuite	BV-REFL-CAV	2822	154	NW		Yes
Ensuite	FC-REFL-CAV	2822	1032	SW		Yes
Ensuite	FC-REFL-CAV	2822	1104	SE		Yes
Ensuite	BV-REFL-CAV	2822	2017	SE		Yes
Ensuite	BV-REFL-CAV	2822	174	SW		Yes
Foyer	FC-REFL-CAV	2822	2195	SW	1194	Yes
Garage	CONCBLOCK-190-FCF-PB	1200	12110	NE		Yes
Garage	CONCBLOCK-190-FCF-PB	3264	2295	SE		No
Garage	CONCBLOCK-190-FCF-PB	3264	13113	NW		No

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Garage	CONCBLOCK-190-FCF-PB	3264	3135	SE		Yes
Garage	CONCBLOCK-190-FCF-PB	2064	12110	NE		Yes
Guest WC	BV-REFL-CAV	2822	1810	SE		Yes
Guest WC	BV-REFL-CAV	2822	2333	SW		Yes
Guest WC	FC-REFL-CAV	2822	99	NW		Yes
Indoor Outdoor Living	FC-REFL-CAV	2822	2188	NE	5853	Yes
Indoor Outdoor Living	FC-REFL-CAV	2822	5432	NW	1043	Yes
Kitchen/Living	FC-REFL-CAV	2400	6908	NE	2966	Yes
Kitchen/Living	FC-REFL-CAV	2400	1812	NW	6902	Yes
Kitchen/Living	FC-REFL-CAV	2400	4027	NE	1156	Yes
Kitchen/Living	BV-REFL-CAV	3175	5199	SE	73	Yes
Kitchen/Living	BV-REFL-CAV	2822	186	NE		Yes
Kitchen/Living	FC-REFL-CAV	2822	3296	NW	2906	Yes
Kitchen/Living	FC-REFL-CAV	2822	2788	SW	3306	Yes
Kitchen/Living	BV-REFL-CAV	3175	4993	NW	97	Yes
Kitchen/Living	BV-REFL-CAV	2822	100	SE		Yes
Kitchen/Living	BV-REFL-CAV	2822	739	NE	1032	Yes
Kitchen/Living	FC-REFL-CAV	508	6801	NE	130	Yes
Kitchen/Living	FC-REFL-CAV	410	1685	NW	151	Yes
Kitchen/Living	FC-REFL-CAV	312	4740	NE	127	Yes
Kitchen/Living	FC-REFL-CAV	665	11628	SW		Yes
LMR	CONCBLOCK-190-FCF-PB	3264	1832	SE		No
LMR	CONCBLOCK-190-FCF-PB	3264	1389	SW		No
Laundry	BV-REFL-CAV	2822	1699	SE		Yes
Laundry	BV-REFL-CAV	2822	2323	SW		Yes
Laundry	FC-REFL-CAV	2822	99	NW		Yes

* Refer to glossary.



External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Lift	CONCBLOCK-190-FCF-PB	3264	1538	SE		No
Lift	CONCBLOCK-190-FCF-PB	3264	338	NE		No
Lift	BV-REFL-CAV	2822	1597	SE		Yes
Lift	BV-REFL-CAV	2822	174	NE		Yes
Lift	BV-REFL-CAV	2822	1610	SE		Yes
Lift	BV-REFL-CAV	2822	174	NE		Yes
Master Bedroom	BV-REFL-CAV	2822	658	SW		Yes
Master Bedroom	BV-REFL-CAV	2822	140	SE		Yes
Master Bedroom	FC-REFL-CAV	2822	4040	SW		Yes
Master Bedroom	FC-REFL-CAV	2822	4534	NW		Yes
Master Bedroom	FC-REFL-CAV	2822	2961	NE	3297	Yes
Mechanical Plant Room	CONCBLOCK-190-FCF-PB	3264	3682	SE		No
Mechanical Plant Room	CONCBLOCK-190-FCF-PB	3264	720	SW		No
Pantry	BV-REFL-CAV	2625	1356	SE	73	Yes
Pantry	BV-REFL-CAV	2625	174	SW		Yes
Pool Equipment Room	CONCBLOCK-190-FCF-PB	3264	2270	SW		No
Pool Equipment Room	CONCBLOCK-190-FCF-PB	3264	4048	NW		No
Staircase Base	FC-REFL-CAV	2822	3300	SE		Yes
Study/Bedroom 04	BV-REFL-CAV	2822	519	NE	3175	Yes
Study/Bedroom 04	BV-REFL-CAV	2822	4978	SW	852	Yes
Study/Bedroom 04	BV-REFL-CAV	2822	4452	NW	4739	Yes
Foyer	FC-REFL-CAV	2822	1259	SW		Yes
Staircase Base	FC-REFL-CAV	2822	3275	SE		Yes
Water Storage	CONCBLOCK-190-FCF-PB	3264	4427	SW		No
Water Storage	CONCBLOCK-190-FCF-PB	3264	982	SE		No

* Refer to glossary.

Internal wall type

Wall ID	Wall Type	Area (m ²)	Bulk insulation
CONBLOCK-190-PB1	Concrete Block 190mm Concrete - Plasterboard Internally	70.0	0.00
INT-PB	Internal Plasterboard Stud Wall	203.9	0.00

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Antechamber	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	3.8	N/A	0.00	Tile
Bathroom	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	4.8	N/A	0.00	Tile
Bathroom Hallway	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	2.7	N/A	0.00	Tile
Bedroom 02	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	22.6	N/A	0.00	Tile
Bedroom 03	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	18.9	N/A	0.00	Tile
Communications Room	CSOG-200: Concrete Slab on Ground (200mm)	5.9	N/A	0.00	Tile
Downstairs	CSOG-200: Concrete Slab on Ground (200mm)	17.0	N/A	0.00	Tile
Ensuite	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	15.3	N/A	0.00	Tile
Foyer	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	8.8	N/A	0.00	Tile
Garage	CSOG-200: Concrete Slab on Ground (200mm)	129.0	N/A	0.00	Exposed
Guest WC	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	4.2	N/A	0.00	Tile
Indoor Outdoor Living	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	35.0	N/A	0.00	Tile
Kitchen/Living	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	82.6	N/A	0.00	Tile
LMR	CSOG-200: Concrete Slab on Ground (200mm)	2.5	N/A	0.00	Tile
Laundry	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	4.0	N/A	0.00	Tile
Lift	CSOG-200: Concrete Slab on Ground (200mm)	2.1	N/A	0.00	Tile
Lift	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	4.4	N/A	0.00	Tile
Master Bedroom	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	27.1	N/A	0.00	Tile
Mechanical Plant Room	CSOG-200: Concrete Slab on Ground (200mm)	11.0	N/A	0.00	Exposed
Pantry	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	3.6	N/A	0.00	Tile
Pool Equipment Room	CSOG-200: Concrete Slab on Ground (200mm)	9.2	N/A	0.00	Exposed

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Staircase Base	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	15.3	N/A	0.00	Tile
Study/Bedroom 04	SUSP-CONC-200: Suspended Concrete Slab Floor (200mm)	22.3	N/A	0.00	Tile
Water Storage	CSOG-200: Concrete Slab on Ground (200mm)	17.9	N/A	0.00	Exposed

Ceiling type

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Antechamber	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Bedroom 03	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Ensuite	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Guest WC	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Indoor Outdoor Living	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Kitchen/Living	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	3.50	Yes
Kitchen/Living	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Lift	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Master Bedroom	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Mechanical Plant Room	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Pantry	FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	3.50	Yes
Pool Equipment Room	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Foyer	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Staircase Base	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Antechamber	1	Downlight	100	Sealed
Bathroom	1	Downlight	100	Sealed
Bathroom	1	Exhaust Fan	350	Sealed

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Bedroom 02	3	Downlight	100	Sealed
Bedroom 03	2	Downlight	100	Sealed
Communications Room	1	Downlight	100	Sealed
Downstairs	2	Downlight	100	Sealed
Ensuite	1	Downlight	100	Sealed
Ensuite	2	Exhaust Fan	350	Sealed
Foyer	1	Downlight	100	Sealed
Guest WC	1	Downlight	100	Sealed
Guest WC	1	Exhaust Fan	350	Sealed
Indoor Outdoor Living	4	Downlight	100	Sealed
Kitchen/Living	12	Downlight	100	Sealed
Kitchen/Living	1	Exhaust Fan	350	Sealed
Laundry	1	Downlight	100	Sealed
Laundry	1	Exhaust Fan	350	Sealed
Master Bedroom	4	Downlight	100	Sealed
Mechanical Plant Room	2	Downlight	100	Sealed
Pantry	1	Downlight	100	Sealed
Pool Equipment Room	1	Downlight	100	Sealed
Staircase Base	2	Downlight	100	Sealed
Study/Bedroom 04	3	Downlight	100	Sealed
Void Staircase	1	Downlight	100	Sealed
Water Storage	2	Downlight	200	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
None		



Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-02: Flat Framed / Skillion Metal Roof & Cathedral PB Ceiling (11°-33°)	1.30	0.50	Medium
SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	0.50	Medium
SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.68	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).

5.7

NATIONWIDE

HOUSE

55.7

55.7

55.7

#HR-UMOU10-02 12/12/2022

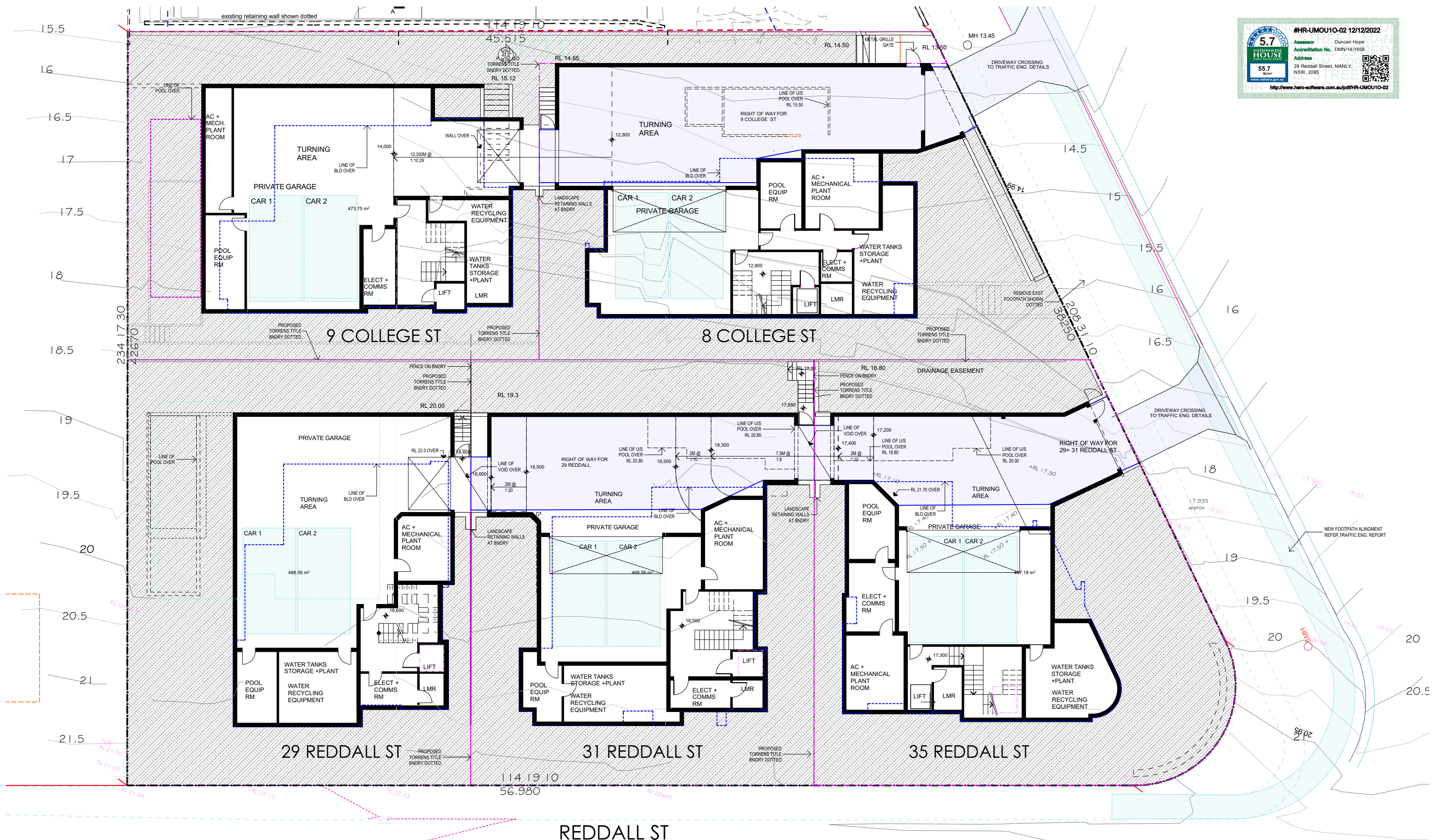
Assessor Duncan Hope

Accreditation No. DMN/14/1658

Address 29 Reddall Street, MANLY, NSW, 2095

http://www.hero-software.com.au/pdf/HR-UMOU10-02

QR CODE



BASEMENT

DA ISSUE 25/01/2023

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DAVID WOLSKI

NSW ARB No. 5297

PROJECT TITLE:

FIVE RESIDENCES

for Reddall Street Pty Ltd

29, 31 & 35 Reddall St + Proposed lots

8 & 9 College St Manly

DRAWING TITLE:

BASEMENT

DRAWING No:

DA01

PROJECT No:

22020

REVISION:

NORTH POINT:

SCALE:

1:200 @ A3

DATE:

25/01/2023

PLOT DATE:

25/01/2023

BIM Server: BIMSRV01 - BIM Server 20/29-35 Reddall Street, Manly 5 Residences - Study 1 - 121121

#HR-UMOU10-02 12/12/2022
Assessor: Duncan Hope
Accreditation No.: DMN/14/1658
Address: 29 Reddall Street, Manly, NSW, 2095
55.7
www.nathers.gov.au
http://www.hero-software.com.au/pdf/HR-UMOU10-02



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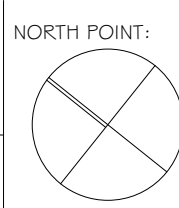
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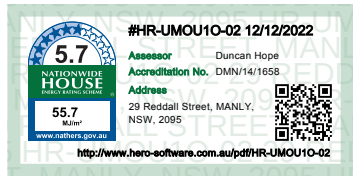
PROJECT TITLE:
FIVE RESIDENCES
for Reddall Street Pty Ltd
29, 31 & 35 Reddall St + 8 & 9 College St
Manly

DRAWING TITLE:
29 REDDALL ST.
DA ISSUE 25/01/2023
GROUND

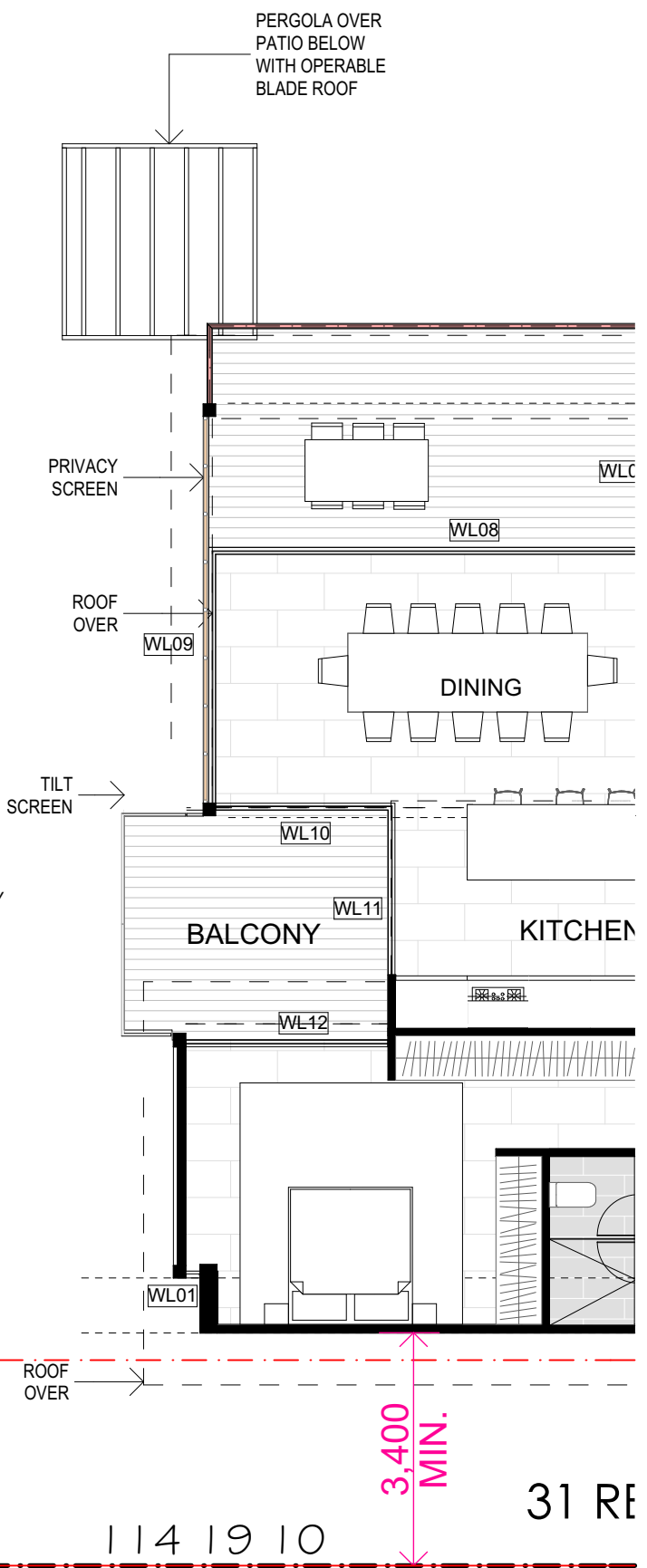
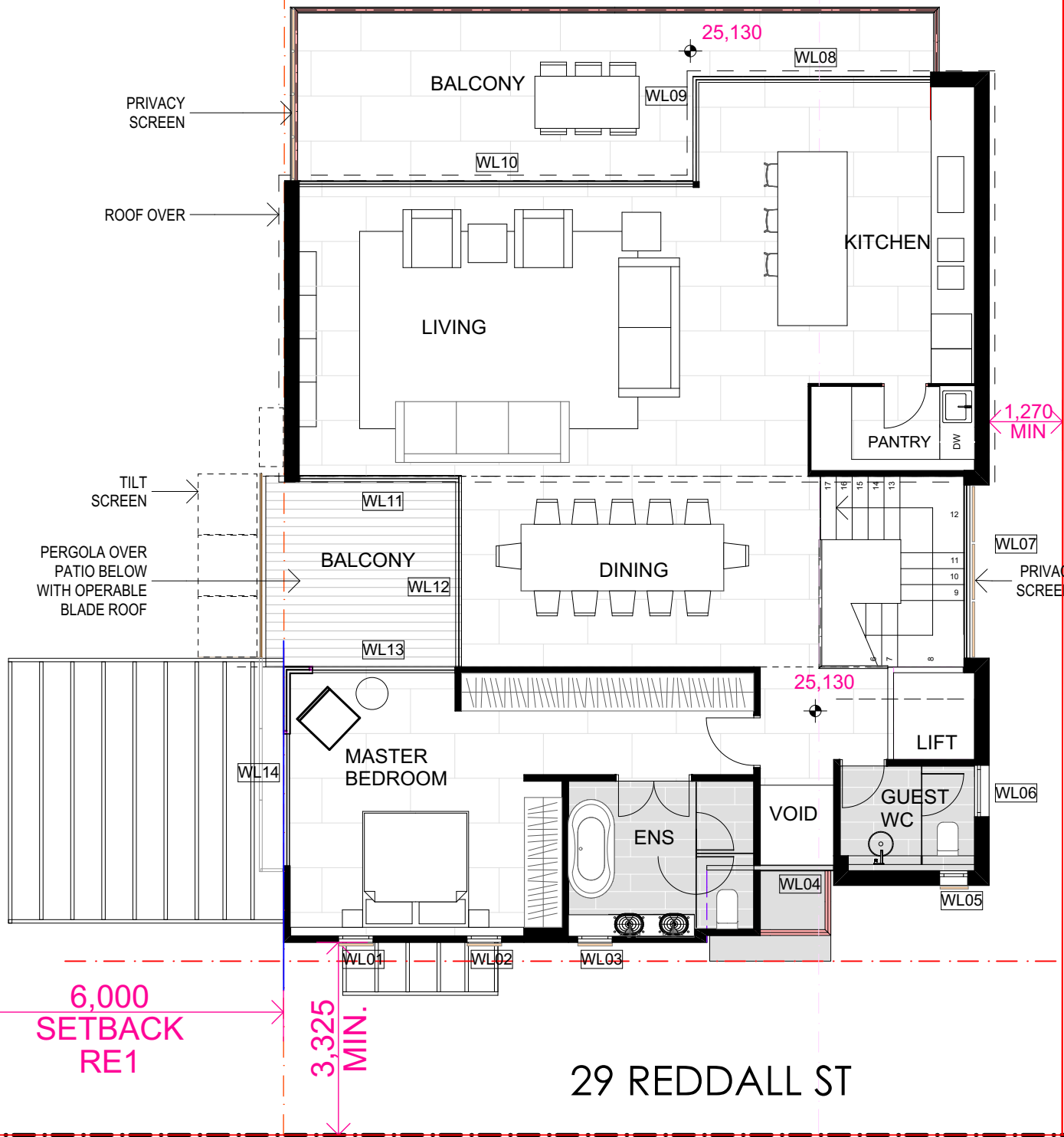
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DA 29.01

PROJECT No:
22020
SCALE:
1:100 @ A3
REVISION:
DATE:
25/01/2023





ZONE RE1-PUBLIC
RECREATION



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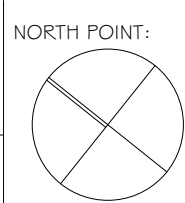
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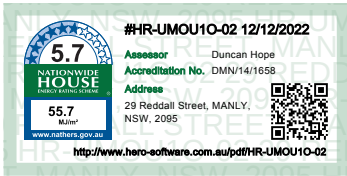
PROJECT TITLE:
FIVE RESIDENCES
for Reddall Street Pty Ltd
29, 31 & 35 Reddall St + 8 & 9 College St
Manly

DRAWING TITLE:
29 REDDALL ST.
DA ISSUE 25/01/2023
FIRST FLOOR

DRAWING No:
DA 29.02

PROJECT No:
22020
SCALE:
1:100 @ A3
REVISION:
DATE:
25/01/2023





19
ZONE RE1-PUBLIC
RECREATION

19.5

EXTENT OF EXISTING
BUILDING TO BE
DEMOLISHED
SHOWN IN RED

20

21

29 REDDALL ST

31 REDDALL

114 19 10
56.980

NOTES:

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PROJECT TITLE:

FIVE RESIDENCES
for Reddall Street Pty Ltd
29, 31 & 35 Reddall St + 8 & 9 College St
Manly

DRAWING TITLE:

29 REDDALL ST.
DA ISSUE 25/01/2023
ROOF

DRAWING No:

DA 29.03

PROJECT No:

22020

SCALE:

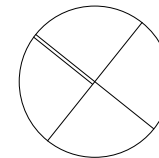
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REVISION:

DATE:

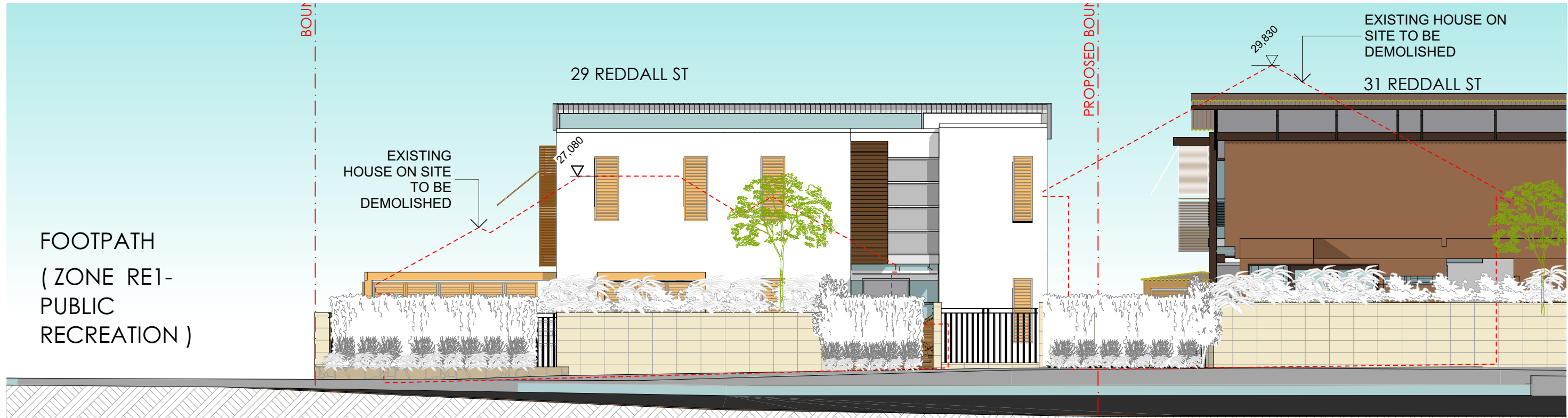
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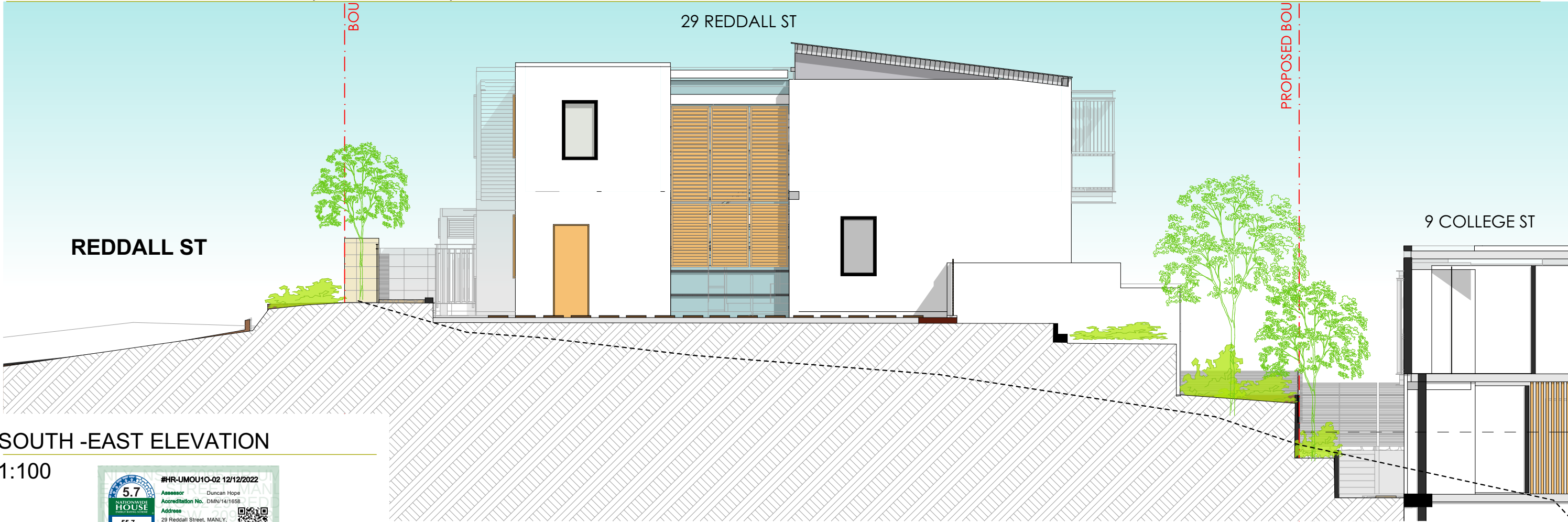


PLOT DATE: 25/01/2023

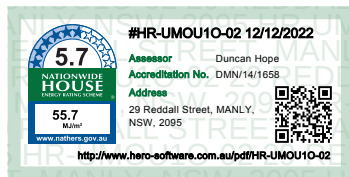
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SOUTH-WEST ELEVATION (REDDALL ST) 1:100



SOUTH -EAST ELEVATION 1:100



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PROJECT TITLE:

FIVE RESIDENCES
for Reddall Street Pty Ltd
29, 31 & 35 Reddall St + 8 & 9 College St
Manly

DRAWING TITLE:

29 REDDALL ST.
DA ISSUE 25/01/2023
SOUTH WEST & SOUTH EAST ELEVATION

DRAWING No:

DA 29.04

PROJECT No:

22020

SCALE:

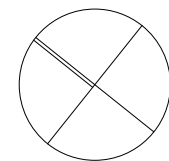
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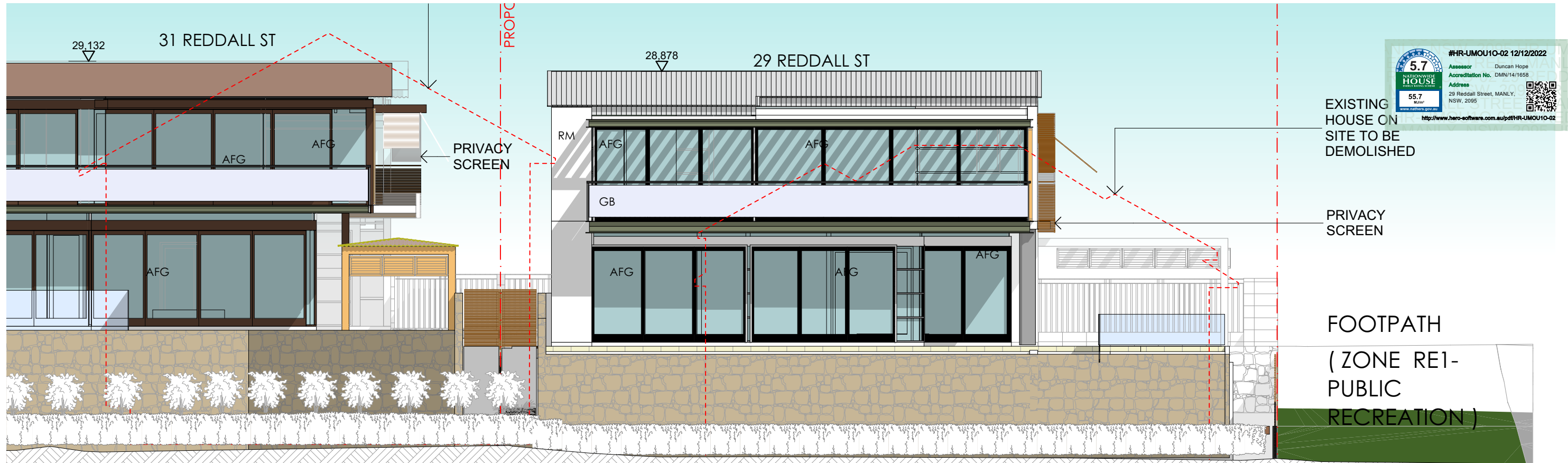
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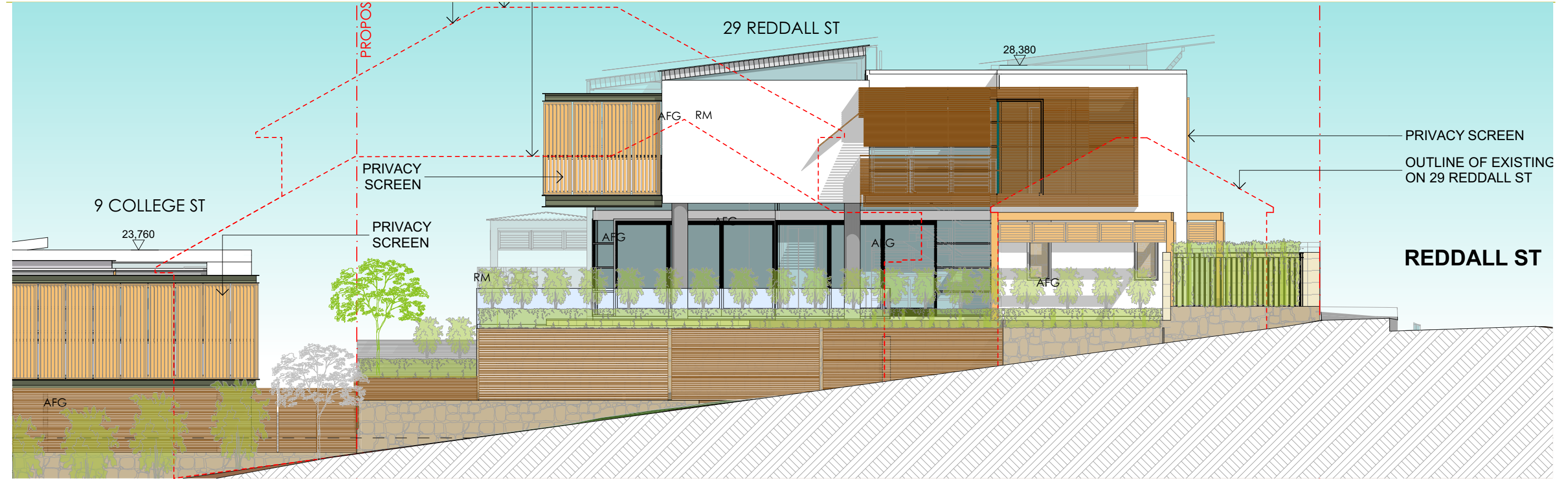
PLOT DATE: 25/01/2023

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NORTH- EAST INTERNAL ELEVATION

1:100



NORTH- WEST ELEVATION

1:100

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FIVE RESIDENCES
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29, 31 & 35 Reddall St + 8 & 9 College St
Manly

DRAWING TITLE:

29 REDDALL ST.
DA ISSUE 25/01/2023
NORTH EAST & NORTH WEST ELEVATION

DRAWING No:

22020

SCALE: 1:100 @ A3

PROJECT No:

22020

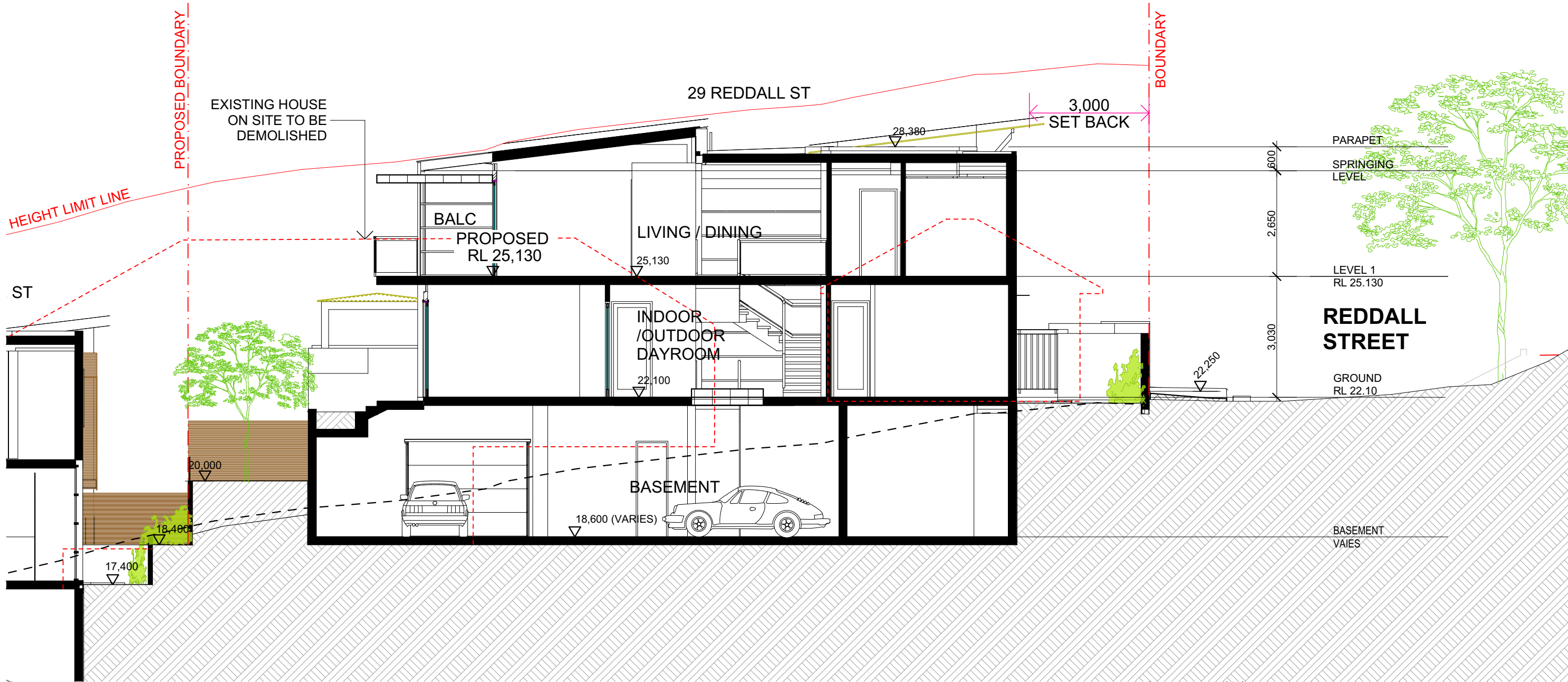
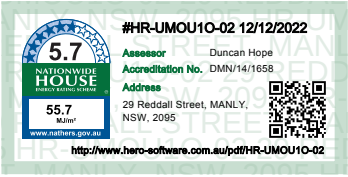
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PLOT DATE: 25/01/2023

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LONG SECTION A

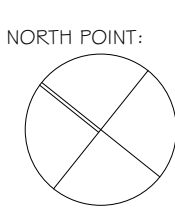
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FIVE RESIDENCES
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29, 31 & 35 Reddall St + 8 & 9 College St
Manly

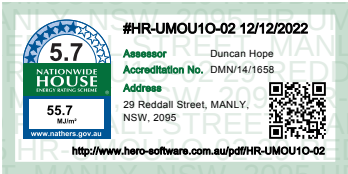
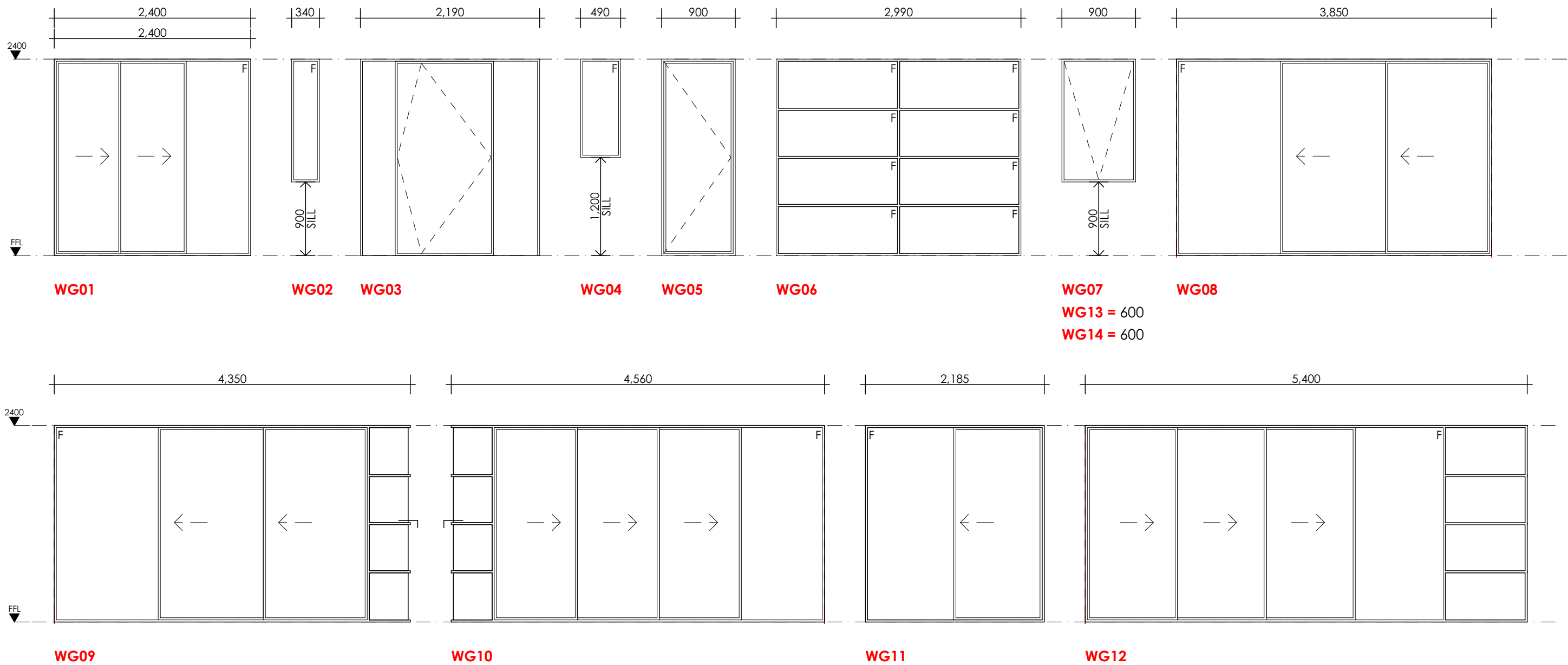
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29 REDDALL ST.
DA ISSUE 25/01/2023
SECTION

DRAWING No:
DA 29.06

PROJECT No:	REVISION:
22020	
SCALE:	DATE:
1:100 @ A3	25/01/2023



GROUND FLOOR



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PROJECT TITLE:

FIVE RESIDENCES
for Reddall Street Pty Ltd
29, 31 & 35 Reddall St + 8 & 9 College St
Manly

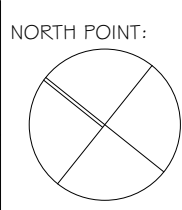
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29 REDDALL ST.
DA ISSUE 25/01/2023
WINDOW SCHEDULE 01

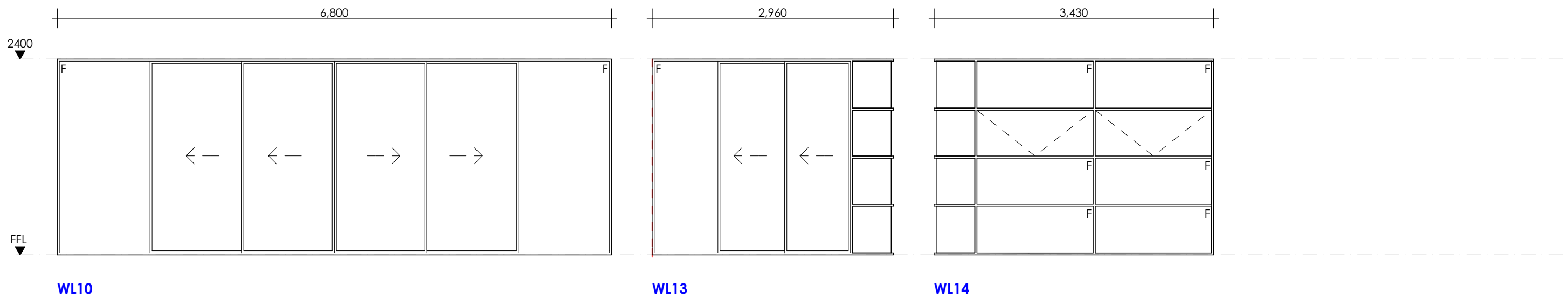
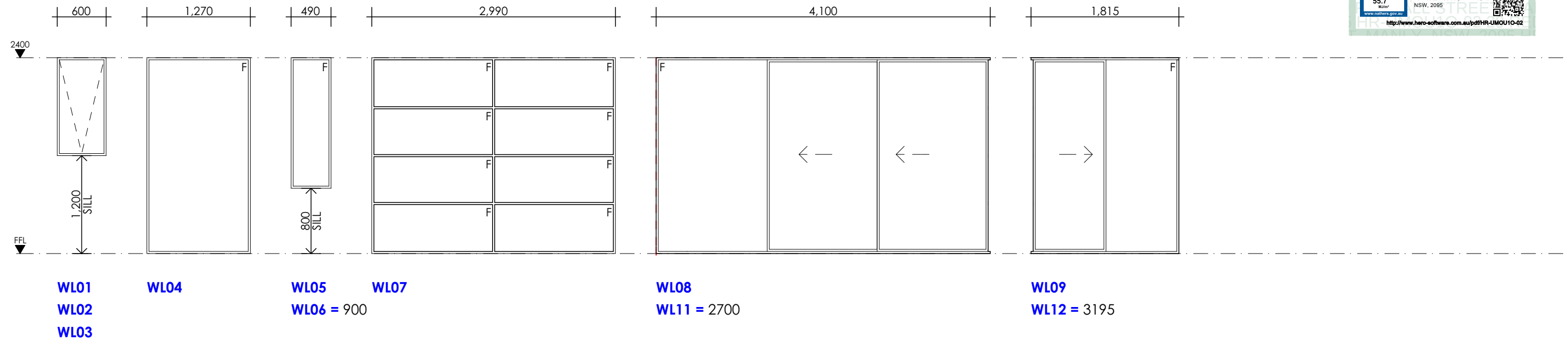
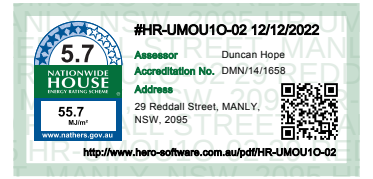
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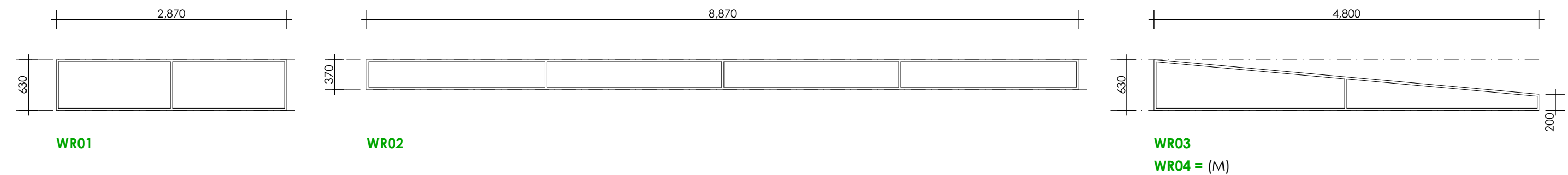
PROJECT No:	REVISION:
22020	
SCALE:	DATE:
1:50 @ A3	25/01/2023



FIRST FLOOR



ROOF



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Manly

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29 REDDALL ST.

DA ISSUE 25/01/2023

WINDOW SCHEDULE 02

DRAWING No:

WR04 = (M)

DRAWING No:

PROJECT No:

22020

SCALE:

1:50 @ A3

REVISION:

DATE:

25/01/2023

NORTH POINT:



PLOT DATE: 25/01/2023