INFORMATION SHEET

CITY OF VINCENT

What does this mean and how can I achieve this?	Applicant Comment – How I have achieved this objective
Environmental Impact *Development that considers the whole of life environmental impact of the building and incorporates measures to reduce this impact.*	
The environmental impact of developments can be impact by considerations such as building orientation, design and construction materials. Construction materials which are durable and are low maintenance generally have a low environmental impact. Some examples of building materials and design choices with reduced environmental impacts include: • Incorporating an east-west orientation (where possible); • Minimising the extent of the building footprint; • Incorporating good solar-passive design; • Reverse brick veneer (internal thermal mass, external insulation); • Low emission concrete; • Lightweight, recycled, non-toxic, minimally processed and recyclable materials; • Gabion walls filled with demolition waste; • High quality (durable), energy and water saving fixtures and fittings (such as reversible ceiling fans, water efficient taps and toilets); and • Installation of appropriate and effective insulation.	- Our proposal has a SE/ NW orientation which allows for our units to take advantage of the Northerly aspect, improving passive solar performance. - The development has been sited in a way to protect the root zone of the neighbouring significant Moreton Bay Fig tree, including permeable paving for the majority of the driveway. A arboreal report has specified construction conditions to minimise the impact on the tree and its root system. - Solar passive design principles have been used including North facing living areas, cross ventilation and deciduous green roof plantings to the garden terraces. - Rather than building adjoining terraces the units have been spaced in a way to preserve some solar aspect and air flow to the neighbouring properties. - The development uses recycled bricks and reverse brick veneer to improve thermal performance. -Water efficient toilets and water fixtures have been specified as well as energy efficient appliances . - The landscaping plan includes a selection of native plants and groundcovers while considering the microclimate of the site. - R 4.0 insulation is included throughout with additional R 2.0- 2.7 insulation in the walls. Cavity insulation has been added where needed. - Smart glass has been used in Unit 1 to improve solar performance. - Ample on structure planting opportunities have been included to add a biophilic element to the design, complimenting the surrounding environment.
Thermal Performance *Development that optimises thermal performance of the building throughout the year through design elements and material selection.*	
Thermal performance relates to the efficiency of buildings and materials to retain or transmit heat. In summer, a development with poor thermal performance will often absorb and retain more heat, resulting in the inside of the building feeling hotter. Design elements which can assist with achieving a high level of thermal performance relate to solar-passive design and includes the orientation and layout of the building, the placement of thermal mass, and the use of insulation. Material selection which can assist with achieving a high level of thermal performance can include those which have thermal mass (such as concrete, brick, tile, rammed earth) and insulation properties (such lightweight cladding, wood, recycled plastic composite, range of insulation materials, strategic use of air gaps).	- The solar passive layout of the development has helped it achieve a 6 star energy rating. This has been aided by - light coloured roof - reverse brick veneer - Seals to all external doors and windows - Self closing dampers to exhaust fans - Cavity insulation to some areas of double brick construction - Smart glass to some Unit 1 windows - Ample cross ventilation to capture SW breezes

INFORMATION SHEET

CITY OF VINCENT

What does this mean and how can I achieve this?	Applicant Comment – How I have achieved this objective
Solar Passive Design *Development shall incorporate site planning principles that maximise solar passive design opportunities for both summer and winter*	
Where the long axis of building runs east-west, the majority of glazing being provided to the north, with limited glazing provided to the east and west; and/or The inclusion of a central light well or courtyard can help to maximise access to northern light.	Majority of the glazing has been provided along the North- Easterly aspect. Unit 1 is subjected to some significant solar gain so Smart Glass has been specified for the affected windows.
Sunlight and Ventilation *The provision of natural ventilation and daylight penetration to reduce energy consumption*	
• Rooms provided with ventilation openings on both sides to allow cross-flow of air; • Maximum glazing provided to north-facing living areas; • Bedrooms being located on the south; and/or • Utility rooms and garages being located on east and west sides of a dwelling.	-All habitable rooms have ample ventilation and natural light. -Highlight windows have been provided on the SW side to capture summer breezes and create cross ventioation. -The units have small footprints and are at a maximum 7m deep from the Northerly aspect, resulting in ample natural light penetration and efficient natural cooling from breezes.
Solar Heating *The provision of daytime areas with north-facing glazing to allow passive solar heating during winter*	
• Up to 80% of the glazing provided to north facing living areas being unshaded in winter, and fully shaded by external structures in summer.	- The living areas have a N/S orientation allowing access to winter sun along one side of the room. This creates zones of winter warmth while maintaining a temperature/ shade transition within the space. Occupants can move within this zone to choose their personal level of comfort. - Many of the North facing living areas are shaded by the significant tree to the NW
Cross Ventilation *The provision of openable windows and/or ceiling fans to habitable rooms or occupied spaces that allow natural and cross ventilation*	
• Windows located on north and south side of the dwelling being openable to utilise cooling breezes in summer; and/or • Reversible ceiling fans facilitate cooling in summer and improve air dispersion for more efficient heating in winter.	-Cross ventilation windows have been incorporated along the South side to aid in cross ventilation. - The shallow depth of the homes ensures the breezes will flow easily through the whole house, reaching all rooms.
Water Re-use *The provision of recovery and re-use of rainwater, storm water, grey water and/or black water for non-potable water applications*	
• Rainwater captured in tank/s above or below ground and plumbed into toilet and laundry; • Greywater used for garden irrigation, or hand basin draining into toilet cistern for flushing; and/or • Soft landscaping is maximised to increase on-site stormwater infiltration.	- Water wise plants have been selected where appropriate in the landscaping plan. Lawns have been kept to a minimum. - Majority of the driveway consists of permeable paving to increase stormwater infiltration.

INFORMATION SHEET

CITY OF VINCENT

What does this mean and how can I achieve this?	Applicant Comment – How I have achieved this objective
Solar Gain *Incorporation of shading devices to reduce unwanted solar gain in summer and increase passive solar gain in winter*	
• Eaves, pergolas and other external shade structures designed to the correct depth to provide 0% shading in mid-winter and 100% shading in mid-summer. • Such structures may also be movable, (e.g. mobile screens and adjustable pergolas) to allow increased control over light and heat gain.	- Many of the North facing living areas are shaded by the significant tree to the NW - Some overhangs have been provided to West and East facing windows in Units 1 & 4. - Modelling has shown that the addition of additional shade awnings to N facing windows causes a negative impact on the energy rating in most cases. - Pergolas with deciduous vines over the garden terraces will reduce solar gain in Summer and allow solar access in winter.
Energy Consumption *Integration of renewable energy and energy storage systems to optimise energy consumption.*	
• Solar photovoltaic system (with or without battery storage) for electricity generation; • Solar or heat pump hot water system; and/or • Smart-wired home to enable automated diversion of excess solar energy to power air conditioners and other appliances and reduce energy use at other times.	Energy efficient appliances have been specified
Solar Absorptance ***Flat roof*** *structures that are not visible from the street or adjacent properties shall have a maximum solar absorptance rating of 0.4* or ***Pitched roof*** *structures or roof structures that are visible from the street or adjacent properties shall have a maximum solar absorptance rating of 0.5, unless a suitable alternative is identified in the Urban Design Study*	
Solar absorptance rating is a measure of how much solar energy a material absorbs and therefore how hot it gets when exposed to the sun. A rating of zero means no absorption and the material remains cool. A rating of 1 is 100% absorption and the material becomes very hot. As a general rule, light roof colours have lower absorptance values than dark roof colours. Roofing material suppliers can provide the absorptance values of their colour range. Roofs that are visible from the street or adjacent properties are permitted a higher absorptance value because lighter colours (which have lower absorptance values) may be visually less comfortable for some neighbours.	- Flat, light coloured roofing has been chosen -Much of the roof will be shaded by the adjacent tree, reducing solar absorptance. - The darker wall colours used for the upper floor levels are compensated by the reverse brick veneer used and the wall insulation added.

INFORMATION SHEET

CITY OF VINCENT

What does this mean and how can I achieve this?	Applicant Comment – How I have achieved this objective
Environmental Performance Demonstrate that the development is capable of achieving the following performance standards when compared against the Perth statistical average for residences: • 50% reduction in global warming potential (greenhouse gas emissions); and • 50% reduction in net fresh water use. The acceptable method for demonstrating this is an independently reviewed EN15978 compliant Target Setting life cycle assessment (LCA) with a 20% factor of safety applied to improvement strategies	
Applications for new Single Houses and Grouped Dwellings should be accompanied by a target setting LCA which measures the environmental performance of the building over its lifetime, to understand how the design contribute towards reduced environmental impacts. You can find an LCA assessor by contacting the Australian Life Cycle Assessment Society (ALCAS) or by doing a general internet search. Please ensure that you or the assessor you engage use methodologies compliant with: • Environmental standard EN15978 – Sustainability of construction works – Assessment of environmental performance of buildings – Calculation method; and • That the system boundary includes all Life Cycle Modules (A1-2, B1-7, C1-4 and D) in addition to non-integrated energy (plug loads). As an alternative to the LCA for Single and Grouped Dwellings, the City may accept an 8 star NatHERS rating, in conjunction with the development meeting the other local housing objectives listed above. The City can also consider other environmental sustainable design reports, however it is recommended these be discussed with the City prior to engaging someone, to ensure that the report will be accepted by the City.	A Life Cycle Assessment has not yet been performed.

Please complete all sections of this template and send to **mail@vincent.wa.gov.au** along with all relevant attachments. Alternatively, you can submit your application in person at our **Administration Centre (244 Vincent Street, Leederville)** or post to **PO Box 82, Leederville, 6902**.

Building Energy Efficiency Certificate - New Dwelling

modus compliance pty ltd

Site Details

Prepared for:	Tam
Address:	Unit 1, 109 Palmerston Street, Perth
Local Government Area:	City of Perth
Description of Building Works:	Class 1A Dwelling

Report Details

Modus Ref:	C22-0136
Report Revision:	1
Report Date:	14/09/2022

Assessment Details

Climate Zone:	5
Conditioned Floor Area:	188.6 m2
Unconditioned Floor Area:	52.0 m2
Adjusted Proposed Cooling:	42.5 MJ/m2
Adjusted Proposed Heating:	26.8 MJ/m2
Adjusted Total:	69.3 MJ/m2
Software:	BERS Pro Plus V4.4.1.5

Unit 13
127 Herdsman Parade
Wembley
WA 6014
PO Box 222
Como WA 6952
t 08 9444 5922
w www.modcom.net.au
e info@modcom.net.au

6.0 Stars

★★★★★★

Certified By

N. Muscat

Natasha Muscat
Assistant Building Surveyor

Verification

To verify this rating report, scan the QR code

KMART NATIONAL SUPPLIER OF THE YEAR; Cost Savings 2015

2013 INDUSTRY AWARD
AIBS Australian Institute of Building Surveyors

Modus Compliance Pty Ltd
ABN 86 144 967 920
ACN 144 967 920

Building Energy Efficiency Certificate - New Dwelling

Site Details

Prepared for:	Tam
Address:	Unit 2, 109 Palmerston Street, Perth
Local Government Area:	City of Perth
Description of Building Works:	Class 1A Dwelling

Report Details

Modus Ref:	C22-0136
Report Revision:	1
Report Date:	14/09/2022

Assessment Details

Climate Zone:	5
Conditioned Floor Area:	144.7 m2
Unconditioned Floor Area:	51.5 m2
Adjusted Proposed Cooling:	36.3 MJ/m2
Adjusted Proposed Heating:	33.7 MJ/m2
Adjusted Total:	70.0 MJ/m2
Software:	BERS Pro Plus V4.4.1.5

6.0 Stars

★★★★★★

Certified By

Natasha Muscat
Assistant Building Surveyor

Verification

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Wembley
WA 6014
PO Box 222
Como WA 6952
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w www.modcom.net.au
e info@modcom.net.au

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ABN 86 144 967 920
ACN 144 967 920

Building Energy Efficiency Certificate - New Dwelling

Site Details

Prepared for:	Tam
Address:	Unit 3, 109 Palmerston Street, Perth
Local Government Area:	City of Perth
Description of Building Works:	Class 1A Dwelling

Report Details

Modus Ref:	C22-0136
Report Revision:	1
Report Date:	14/09/2022

Assessment Details

Climate Zone:	5
Conditioned Floor Area:	145.4 m2
Unconditioned Floor Area:	49.1 m2
Adjusted Proposed Cooling:	38.1 MJ/m2
Adjusted Proposed Heating:	30.2 MJ/m2
Adjusted Total:	68.3 MJ/m2
Software:	BERS Pro Plus V4.4.1.5

6.1 Stars

★★★★★★☆

Certified By

Natasha Muscat
Assistant Building Surveyor

Verification

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127 Herdsman Parade
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WA 6014
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Australian Institute of Building Surveyors

Modus Compliance Pty Ltd
ABN 86 144 967 920
ACN 144 967 920

Building Energy Efficiency Certificate -

New Dwelling

Site Details

Prepared for:	Tam
Address:	Unit 4, 109 Palmerston Street, Perth
Local Government Area:	City of Perth
Description of Building Works:	Class 1A Dwelling

Report Details

Modus Ref:	C22-0136
Report Revision:	1
Report Date:	14/09/2022

Assessment Details

Climate Zone:	5
Conditioned Floor Area:	163.2 m2
Unconditioned Floor Area:	49.1 m2
Adjusted Proposed Cooling:	36.3 MJ/m2
Adjusted Proposed Heating:	31.9 MJ/m2
Adjusted Total:	68.2 MJ/m2
Software:	BERS Pro Plus V4.4.1.5

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Energy Specification

BCA 2019 Amdt 1 Vol Two Part 3.12.0(a)(i) - Class 1 building, complying with

3.12.1.1	Building fabric thermal insulation	✓
3.12.1.2(c)	Roofs - Thermal break	
3.12.1.2(e)	Roofs - Loss of ceiling insulation (calculated in software)	✓
3.12.1.4(d)	External walls - Thermal break	
3.12.1.5(c)	Floors - In-slab or in-screed heating or cooling system	
3.12.3.1	Building sealing - Chimneys and flues	
3.12.3.2	Building sealing - Roof lights	
3.12.3.3	Building sealing - External windows and doors	✓
3.12.3.4	Building sealing - Exhaust fans	✓
3.12.3.5	Building sealing - Construction of ceilings, walls and floors	✓
3.12.3.6	Building sealing - Evaporative coolers	
3.12.5.1	Services - Insulation of services	✓
3.12.5.2	Services - Central heating water piping	✓
3.12.5.3	Services - Heating and cooling ductwork	
3.12.5.4	Services - Electric resistance space heating	
3.12.5.5	Services - Artificial lighting (calculations attached)	✓
3.12.5.6	Services - Water heater in a heated water supply system	✓
3.12.5.7	Services - Swimming pool heating and pumping	
3.12.5.8	Services - Spa pool heating and pumping	
WA 2.3.1	Water use efficiency	✓
WA 2.3.2	Swimming pool covers and blankets	
WA 2.3.3	Heated water use efficiency	✓

NOTE: Raised walls between ceiling heights & upstands of coffered ceilings to be insulated

Roof	*Added Insulation*	*System Value*	*Detail*
Metal deck	None	n/a	As per attached plans

Ceiling	*Added Insulation*	*System Value*	*Detail*
Plasterboard	R4.0	n/a	As per attached plans

Skylights	*Glass*	*U-Value*	*SHGC*	*Detail*
n/a				

External Wall	*Added Insulation*	*System Value*	*Detail*

Single leaf brick	None	n/a	As per attached plans
Cavity brick	Aircell permicav (or equivalent)	R1.8	As per attached plans
Cavity brick	None	n/a	As per attached plans
Reverse brick veneer	R2.7	n/a	Unit 1
Reverse brick veneer	R2.0	n/a	Unit 2-4

Internal Wall	*Added Insulation*	*System Value*	*Detail*
Single leaf brick	None	n/a	As per attached plans

External Floor	*Added Insulation*	*Floor Covering*	*Detail*
Concrete	None	None	As per attached plans
Concrete	None	Ceramic Tiles	As per attached plans
Concrete	None	Not Specified	As per attached plans
Suspended Concrete	None	Not Specified	As per attached plans

Internal Floor	*Added Insulation*	*Floor Covering*	*Detail*
Suspended Concrete	None	Ceramic Tiles	As per attached plans
Suspended Concrete	None	Not Specified	As per attached plans

Window System	*Glass*	*U-Value*	*SHGC*	*Detail*
Jason premium awning window	Single clear	6.57	0.63	As per attached plans
Jason premium fixed window	Single clear	6.45	0.78	As per attached plans
Jason premium sliding window	Single clear	6.60	0.74	As per attached plans
Jason premium sliding door	Single clear	6.12	0.70	As per attached plans

Jason benchmark hinge door	Single clear	6.03	0.59	As per attached plans
Jason premium fixed window	4SP10	4.57	0.70	Unit 1 W06, W07, W10, W14
Jason premium sliding window	4SP10	4.68	0.66	Unit 1 W09, W15
Jason premium awning window	4SP10	5.12	0.57	Unit 1 W05

PART 3.12.1 - BUILDING FABRIC

3.12.1.1 Building fabric thermal insulation

(a) Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it -
  (i) Abuts or overlaps adjoining insulation other than at supporting members such as columns, studs, noggings, joists, furring channels and the like where the insulation must butt against the member; and
  (ii) Forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier
  (iii) Does not affect the safe or effective operation of a domestic service or fitting

(b) Where required, reflective insulation must be installed with -
  (i) The necessary airspace, to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and
  (ii) The reflective insulation closely fitted against any penetration, door or window opening; and
  (iii) The reflective insulation adequately supported by framing members; and
  (iv) Each adjoining sheet or roll membrane being -
    (A) Overlapped not less than 150mm; or
    (B) Taped together

(c) Where required, bulk insulation must be installed so that -
  (i) It maintains its position and thickness, other than where it crosses roof battens, water pipes, electrical cabling or the like; and
  (ii) In a ceiling, where there is no bulk insulation or reflective insulation in the external wall beneath, it overlaps the external wall by not less than 50mm

PART 3.12.3 - BUILDING SEALING

3.12.3.3 External windows and doors

(a) An external door, internal door between a class 1 building and an unconditioned class 10a building, openable window and other such opening must be sealed

(b) A seal to restrict air infiltration -
  (i) For the bottom edge of a door, must be a draft protection device; and
  (ii) For the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compressible strip, fibrous seal or the like

(c) A window complying with the maximum air infiltration rates specified in AS 2047 need not comply with (b)(ii)

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

3.12.3.5 Construction of roofs, walls and floors

(a) Ceilings, walls, floors and any opening such as a window frame, door frame, roof light frame or the like must be constructed to minimise air leakage in accordance with (b) when forming part of the external fabric

(b) Construction required by (a) must be -

(i) Enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or

(ii) Sealed at junctions and penetrations with -

(A) Close-fitting architrave, skirting or cornice; or

(B) Expanding foam, rubber compressive strip, caulking or the like

PART 3.12.5 - SERVICES

3.12.5.1 Insulation of services

Thermal insulation for central heating water piping and heating and cooling ductwork must -

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

(b) Be able to withstand the temperatures within the piping or ductwork; and

(c) Use thermal insulation material in accordance with AS/NZS 4859.1

3.12.5.2 Central heating water piping

Central heating water piping that is not within a conditioned space must be thermally insulated to achieve the minimum material R-Value in accordance with table 3.12.5.1

3.12.5.6 Water heater in a heated water supply system

A water heater in a heated water supply system must be designed and installed in accordance with part B2 of NCC Volume Three - Plumbing Code of Australia

WA 2.3 - ACCEPTABLE CONSTRUCTION PRACTICE

WA 2.3.1 Water use efficiency

(a) All tap fittings other than bath outlets and garden taps must be a minimum of 4 stars WELS rated

(b) All showerheads must be a minimum of 3 stars WELS rated

(c) All sanitary flushing systems must be a minimum of 4 stars WELS rated dual flush

WA 2.3.3 Heated water use efficiency

All internal heated water outlets (such as taps, showers and washing machine water supply fittings) must be connected to a heater water system or a re-circulating heated water system with pipes installed and insulated in accordance with AS/NZS 3500: Plumbing and Drainage Part 4 Heated Water Services. The pipe from the heater water system or re-circulating heated water system to the furthest heated water outlet must not be more than 20m in length or 2 litres of internal volume

Lighting Calculator

BCA Volume Two Part 3.12.5.5 Artificial Lighting

(a) The lamp power density or illumination power density of artificial lighting, excluding heaters that emit light, must not exceed the allowance of -
  (i) 5 W/m^2 in a class 1 building; and
  (ii) 4 W/m^2 on a verandah, balcony or the like attached to a class 1 building; and
  (iii) 3 W/m^2 in a class 10a building associated with a class 1 building

(b) The illumination power density allowance in (a) may be increased by dividing it by the relevant illumination power density adjustment factor for a control device in Part 3.12.5.5(f) as applicable

(c) When designing the lamp power density or illumination power density, the power of the proposed installation must be used rather than nominal allowances for exposed batten holders or luminaires

(d) If halogen lamps are installed, they must be separately switched from fluorescent lamps

(e) Artificial lighting around the perimeter of a building must -
  (i) Be controlled by a daylight sensor; or
  (ii) Have an average light source efficacy of not less than 40 Lumens/W

Porches & porticos with an aggregate area of less than 5m^2 to be considered under the perimeter lighting provision, as per Building Commission Advisory Note 020

	Space	Floor area (m^2)	Maximum permitted wattage
Unit 1	Class 1 building	224.1	1120.5
	Verandah, balcony or the like	28.4	113.4
	Class 10a building	43.1	129.4

	Space	Floor area (m^2)	Maximum permitted wattage
Unit 2	Class 1 building	174.6	872.8
	Verandah, balcony or the like	35.0	140.1
	Class 10a building	41.8	125.3

	Space	Floor area (m^2)	Maximum permitted wattage
Unit 3	Class 1 building	174.6	873.0
	Verandah, balcony or the like	35.0	140.1
	Class 10a building	41.8	125.3

	Space	Floor area (m^2)	Maximum permitted wattage
Unit 4	Class 1 building	192.6	963.1
	Verandah, balcony or the like	34.9	139.6
	Class 10a building	41.8	125.3

C:¥Users¥Daniel¥Riverstone¥Riverstone - Drafting¥Drawings¥Jobs ArchiCad¥5096 Tam - Palmerston¥01 Archicad PLN¥MASTER 5096 Tam - Palmerston v24.pln

Status: Planning Doc's

This Drawing is to be read in conjunction with all relevant Drawings related to the Project for accurate co-ordination of services. The Contractor is to check all dimensions on site before the commencement of work. Should any discrepancies occur, notify the Builder immediately. These Drawings remain the property of the Builder and shall be returned upon request.

LEGEND	
	Power Dome
	Power Pole
T C	Phone Pits
W	Water Conn.
TP 10.00	Top Pillar/Post
TW 10.00	Top Wall
TR 10.00	Top Retaining
TF 10.00	Top Fence

Area Calculations			
	Name	Area	Perimeter
0 Ground Floor			
	Garage	167.1	110,300.0
	Ground Floor	217.0	131,986.5
	Porch	10.7	26,400.2
		394.8 m²	**268,686.7 mm**
1 First Floor			
	Balc 01	5.3	9,360.2
	First Floor	278.7	145,370.2
	Terrace	94.6	77,949.4
		378.6 m²	**232,679.8 mm**
2 Second Floor			
	Balc 02	19.0	32,410.5
	Second Floor	269.0	141,581.4
		288.0 m²	**173,991.9 mm**
		1,061.4 m²	**675,358.4 mm**

TENNIS COURT (WELL CLEAR)

Bitumen Path

BEWARE: Deep sewer junction. Check With Water Corp BUILDER and PLUMBER check GRADE.

Sewer Junction Inv: 12.3 Depth: 3.2 NOTE: UP

Brick Wall

Colorbond Fence (Good Cond.)

Conc. panel ret wall.

Brick Paving.

Clothesline.

Garden Bed. 9.46 m²

Garden Bed. 24.15 m²

Sewer Line as per Water Corp.

Piles required.

Sewer Junction Inv: 12.3 Depth: 3.3 NOTE: UP

PEG GONE

Concrete Path

Sewer M/H (15.79)

NOTE: Approx. Sewer Clearance Line (This line is NOT an easement)

Setbacks MUST be confirmed by Water Corp. before any design work is undertaken. This line is NOT definitive.

Second Floor

First Floor

Ground Floor
UNIT 4.
FFL = 0c
RL = 16.086

Balc 02

Porch

Terrace

Temp Site Fence

Garden Bed.

81.38 m²

Permeable Paving.

New Boundary Fence.

Tree Ø 3.0m Ht 20.0m

Balcony Approx. Floor Level 18.77

Porch

Garage
FFL = -1c
RL = 16.000

#107

2-Storey Brick Units & Galv. On Slab

First Floor

Ground Floor

Tree Protection Zone.

Garage
FFL = -4c
RL = 16.000

Terrace

Clothesline.

Brick Paving.

Screen.

Garden Bed.

Ground Floor
UNIT 3.
FFL = 0c
RL = 16.343

Approximate overshadowing of neighbouring Tree. 211.19 m²

Colorbond Fence (Good Cond.)

Timber Paling Fence (Good Cond.)

Thick Creeper

Garden Bed. 11.00 m² Feature Tree

Termite Protection.

All primary building elements used for the construction of this building will be consist entirely of, or a combination of, materials considered not subject to termite attack. Specifically, all timbers used in this dwelling will be preservative treated in accordance with AS 3660.1 and will comply with Part 3.1.4.2 of the NCC - Volume 2, 2019.

LOT ZONING	R80
LOT AREA	785.00m2
HOUSE AREA	384.10m2
OPEN SPACE	51.07%
OPEN SPACE REQUIRED AS PER R-CODES IS 50%	
NEIGHBOUR'S LOT AREA	781.00m2
SHADOW CAST ONTO LOT	387.28m2
AREA OVERSHADOWED	49.59%
OVERSHADOWING PERMITTED AS PER R-CODES IS 50%	

Overshadowing as per 21st june Midday 387.28 m²

Ground Floor
UNIT 2.
FFL = 0c
RL = 16.343

Garage
FFL = -1c
RL = 16.257

Garage
FFL = -4c
RL = 16.257

Balc 02

Second Floor

First Floor

Surface Area = 212.04 m²

Ground Floor
UNIT 1.
FFL = 0c
RL = 16.600

Balcony Approx. Floor Level 19.24

Porch Approx. Floor Level 16.47

Side gate.

Balc 01

Porch

Garden Bed. 12.64 m²

Garden Bed. 18.40 m²

Barwork Fence On Brick Wall With Pillars

Barwork Fence On Brick Wall With Pillars

Total Landscaping Area.
Garden Beds = 105.55m².
Permeable Paving = 212m².

NAIL&PLATE FOUND NUMB. IN BITUMEN

Meter

Concrete Edge

Bitumen Path

Concrete Path

Mulch

Closest Wire To Boundary

Street Sign

Power & Light Pole (To be relocated.)

Concrete Carbays

Remove Existing. Conc. Crossover

Crossover to Shire recomendations.

Ref Nail At Edge Of Road Approx. A.H.D. level 16.48m (Established from S.S.M. LAWLEY 48A using data supplied by the Geodetic Section of Landgate)

Cycle Lane

RESERVE FOR RECREATION

NOTE/BEWARE:ADVISE TRADES O/Head power lines

Palmerston Street
Bitumen

Scale 1:100

Site Plan

Scale: 1:100

Scale 1:200

LOT MISCLOSE
0.004 m

DISCLAIMER:
Lot boundaries drawn on survey are based on landgate plan only. Survey does not include title search and as such may not show easements or other interests not shown on plan. Title should be checked to verify all lot details and for any easements or other interests which may affect building on the property.

DISCLAIMER:
Survey does not include verification of cadastral boundaries, All features and levels shown are based on orientation to existing pegs and fences only which may not be on correct cadastral alignment. Any designs based or dependent on the location of existing features should have those features' location verified in relation to the true boundary.

DISCLAIMER:
Survey shows visible features only and will not show locations of underground pipes or conduits for internal or mains services. Verification of the location of all internal and mains services should be confirmed prior to finalisation of any design work.

DISCLAIMER:
Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All Sewer details plotted from information supplied by Water Corporation.

COTTAGE SURVEYS LICENSED SURVEYORS

87-89 Guthrie Street
Osborne Park, WA 6017

PO Box 1611
Osborne Park
Business Centre WA 6917

P: (08) 9446 7361
E: perth@cottage.com.au
W: www.cottage.com.au

JOB #	524052	**GPS**	Lat: -31.941124 Long: 115.858205	**ROADS**	Bitumen	**ELEC.**	O/Head
CLIENT	Gordan Tam	**ORDER #**	5096	**KERBS**	Nil	**COMMS.**	Yes
ADDRESS	#109 Palmerston Street	**LOT**	Lot 100 (DP 43470)	**FOOTPATH**	Concrete	**WATER**	Yes
SUBURB	Perth			**SOIL**	Sand	**GAS**	Check Alinta
LGA	CITY OF PERTH	**AREA**	785m² **VOL.** 2599 **FOL.** 361	**DRAINAGE**	Good	**SEWER**	Yes
DRAWN	T. Do	**DATE**	14 Apr 22 **SSA** No	**VEGETATION**	Light Grass Cover	**COASTAL**	No (Approximate Only Confirm With Shire)

modus compliance pty ltd
Building Surveying Contractor - BSC7
C22-0136 14/09/2022
Energy assessor - Natasha Muscat
This plan has been assessed and approved in conjunction with the energy assessment

CITY OF VINCENT RECEIVED 14 September 2022

Site Plan - New - MASTER

BAL Rating: N/A.
Rev No.: DA 01
Job No.: 5096
Dwn No.: 2.02

RIVERSTONE

A: Suite 44 Cottesloe Central Shopping Centre, 460 Stirling Highway, Peppermint Grove, WA 6011
T: 08 9284 4866 F: 08 9284 6144 E: reception@riverstone.com.au
W: www.riverstone.com.au

Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

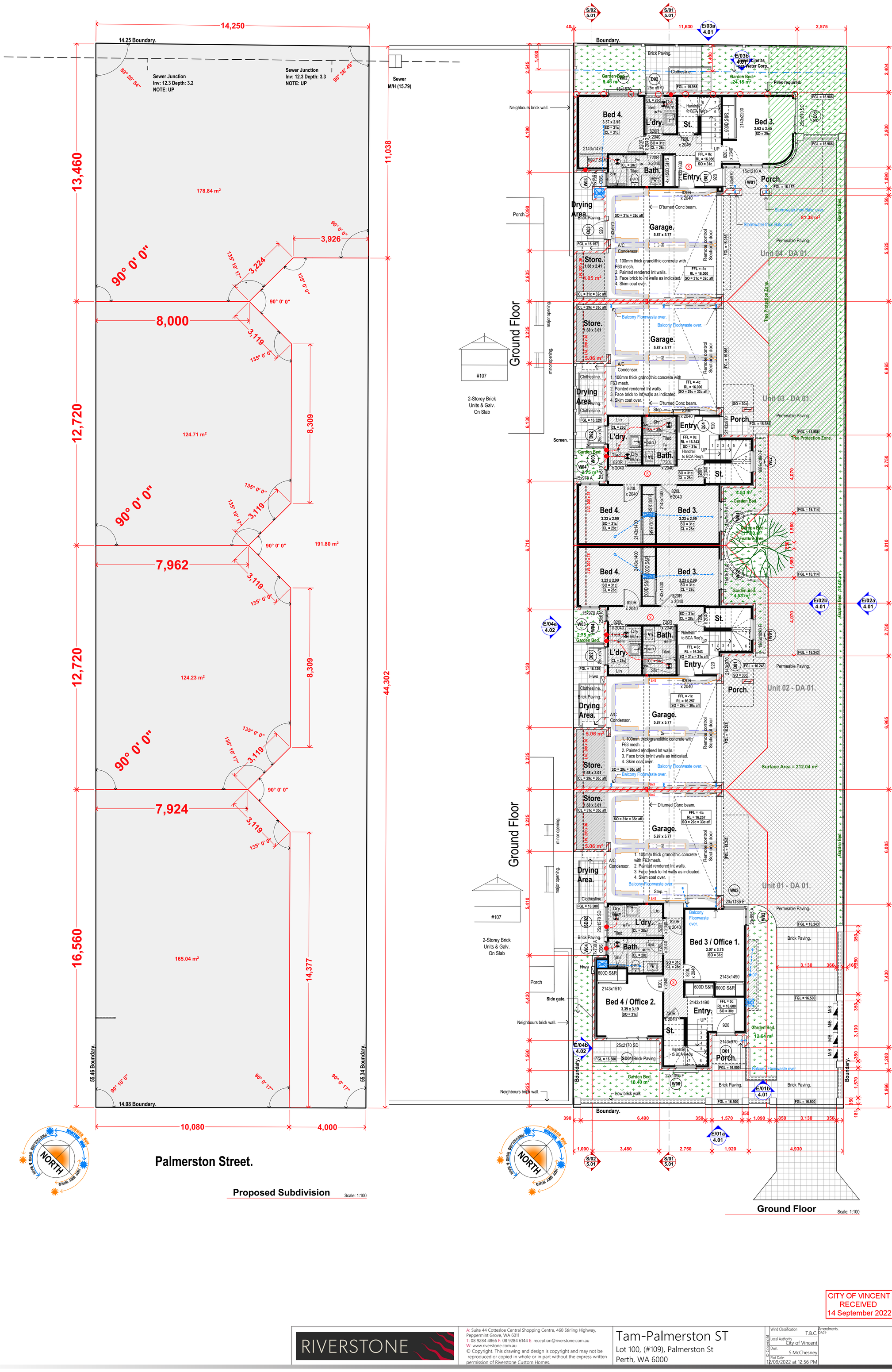
Wind Classification T.B.C.
Local Authority City of Vincent
Dwn. S.McChesney
Plot Date: 10/06/2022 at 9:37 AM

Amendments. DA01-

Signatures:
Client:
Client:
Builder:

Status:
Planning Doc's

Area Calculations			
	Name	Area	Perimeter
0 Ground Floor			
	Garage	167.1	110,300.0
	Ground Floor	217.0	131,986.5
	Porch	10.7	26,400.2
		394.8 m²	**268,686.7 mm**
1 First Floor			
	Balc 01	5.3	9,360.2
	First Floor	278.7	145,370.2
	Terrace	94.6	77,949.4
		378.6 m²	**232,679.8 mm**
2 Second Floor			
	Balc 02	19.0	32,410.5
	Second Floor	269.0	141,581.4
		288.0 m²	**173,991.9 mm**
		1,061.4 m²	**675,358.4 mm**



Total Landscaping Area.
Garden Beds = 105.55m².
Permeable Paving = 212m².

Unit 1.
Cavity insulation throughout
R2.7 insulation to framed external walls
4SP10 smart glass to W5, W6, W7, W9, W10, W14, W15, W16 & SD03

Unit 2.
Cavity insulation to ground floor.

Unit 4.
Cavity insulation to throughout.

LEGEND

- (S) Smoke Alarm - Hard Wired, Interlinked and to AS 3786-2014
- Exhaust fan - flumed to external air and not into the roof space.
- Wall mounted cold water hose tap
- Water supply for fridge
- Gas bayonet point

COMPLIANCE NOTES

Artificial Lighting | To comply with NCC Vol. 2 Part 3.12.5.5

Fall Prevention | Bedroom windows - where floor is 2m more than surface beneath unless opening sash is greater than 1700mm AFL opening must be permanently restricted to 125mm or fitted with a non-removable robust screen.
All other windows - where the fall height is 4m or greater must have a transom above 865mm and a sill height less than 150mm - No restriction is required to opening.
Refer to NCC V2 Part 3.9.2.6 and 3.9.2.7

Boundary Walls To Provide Fire Seperation | To comply with NCC Vol.2 Part 3.7.3.2

Fireplace | To comply with NCC Vol.2 Part 3.10.7

Parapet/Boundary Fireproofing | To comply with NCC Vol.2 Part 3.7.2.4

Staircase, Balustrade and Handrails | To comply with NCC Vol. 2 Part 3.9.1 and 3.9.2 (Nom. 280 Going x 172 Riser).

Stormwater Drainage | To comply with NCC V2 Part 3.1.3 citing AS 3500.3

Swimming Pool Barriers | To comply with AS 1926.1 and 1926.2

Timber Framing | To comply with AS 1684

Termite Protection | All primary building elements used for the construction of this building will consist entirely of, or a combination of, materials considered not subject to termite attack. Specifically, all timbers used in this dwelling will be preservative treated in accordance with AS 3660.1 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1.

Parapet Walls | FMC Homeguard as physical Termite barrier as per AS 3660.1 - 2014 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1

Wet areas | To comply with NCC Vol.2 Part 3.8.1

Steelwork | Exposed steel shall have an anti-corrosive treatment in accordance with the NCC 2019

Ground Floor
Scale: 1:100

Plans - MASTER

BAL Rating: N/A.
Rev No.: DA 01
Job No.: 5096
Dwn No.: 2.03

RIVERSTONE
A: Suite 44 Cottesloe Central Shopping Centre, 460 Stirling Highway, Peppermint Grove, WA 6011
T: 08 9284 4866 F: 08 9284 6144 E: reception@riverstone.com.au
W: www.riverstone.com.au

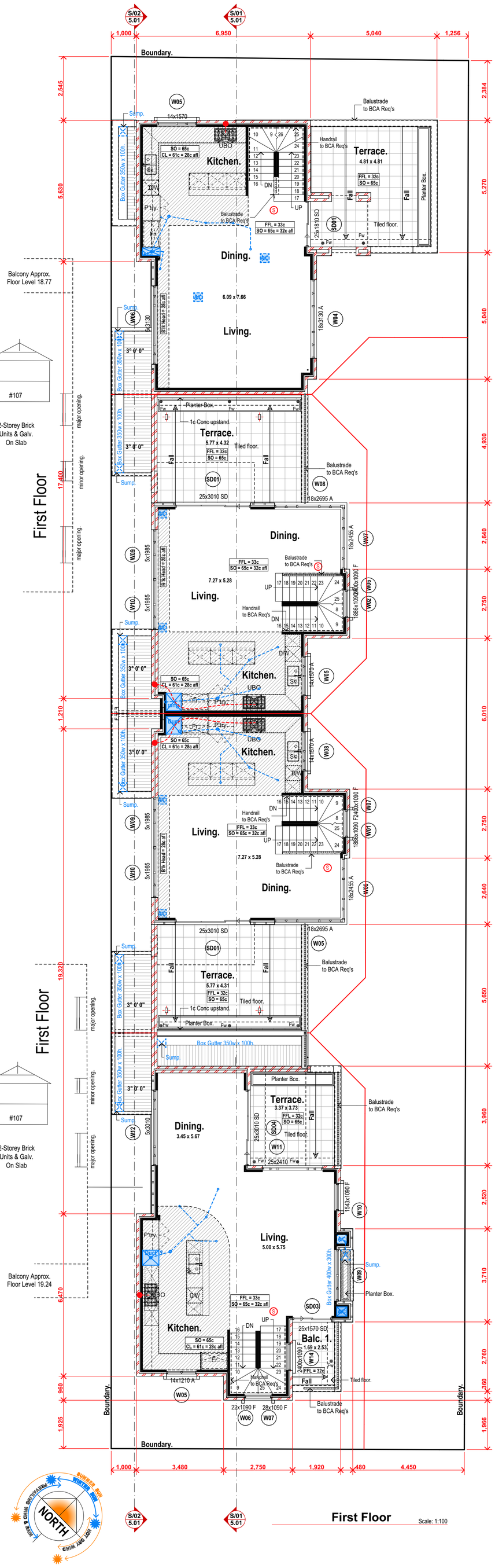
Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

Wind Classification T.B.C.
Local Authority City of Vincent
Dwn. S.McChesney
Plot Date: 12/09/2022 at 12:56 PM
Amendments. DA01-

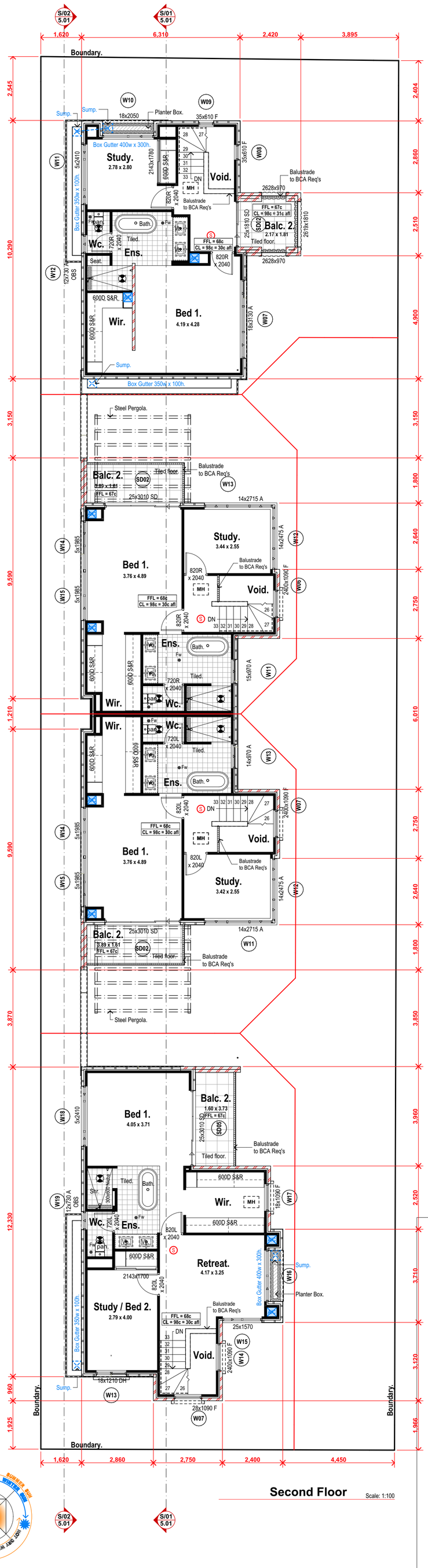
Signatures:
Client:
Client:
Builder:

Status:
Planning Doc's

Area Calculations			
	Name	Area	Perimeter
0 Ground Floor			
	Garage	167.1	110,300.0
	Ground Floor	217.0	131,986.5
	Porch	10.7	26,400.2
		394.8 m²	**268,686.7 mm**
1 First Floor			
	Balc 01	5.3	9,360.2
	First Floor	278.7	145,370.2
	Terrace	94.6	77,949.4
		378.6 m²	**232,679.8 mm**
2 Second Floor			
	Balc 02	19.0	32,410.5
	Second Floor	269.0	141,581.4
		288.0 m²	**173,991.9 mm**
		1,061.4 m²	**675,358.4 mm**



First Floor Scale: 1:100



Second Floor Scale: 1:100

LEGEND

- (S) Smoke Alarm - Hard Wired, Interlinked and to AS 3786-2014
- Exhaust fan - flumed to external air and not into the roof space.
- Wall mounted cold water hose tap
- Water supply for fridge
- Gas bayonet point

COMPLIANCE NOTES

Artificial Lighting | To comply with NCC Vol. 2 Part 3.12.5.5

Fall Prevention | Bedroom windows - where floor is 2m more than surface beneath unless opening sash is greater than 1700mm AFL opening must be permanently restricted to 125mm or fitted with a non-removable robust screen.
All other windows - where the fall height is 4m or greater must have a transom above 865mm and a sill height less than 150mm - No restriction is required to opening.
Refer to NCC V2 Part 3.9.2.6 and 3.9.2.7

Boundary Walls To Provide Fire Seperation | To comply with NCC Vol.2 Part 3.7.3.2

Fireplace | To comply with NCC Vol.2 Part 3.10.7

Parapet/Boundary Fireproofing | To comply with NCC Vol.2 Part 3.7.2.4

Staircase, Balustrade and Handrails | To comply with NCC Vol. 2 Part 3.9.1 and 3.9.2 (Nom. 280 Going x 172 Riser).

Stormwater Drainage | To comply with NCC V2 Part 3.1.3 citing AS 3500.3

Swimming Pool Barriers | To comply with AS 1926.1 and 1926.2

Timber Framing | To comply with AS 1684

Termite Protection | All primary building elements used for the construction of this building will consist entirely of, or a combination of, materials considered not subject to termite attack. Specifically, all timbers used in this dwelling will be preservative treated in accordance with AS 3660.1 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1.

Parapet Walls | FMC Homeguard as physical Termite barrier as per AS 3660.1 - 2014 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1

Wet areas | To comply with NCC Vol.2 Part 3.8.1

Steelwork | Exposed steel shall have an anti-corrosive treatment in accordance with the NCC 2019

Plans - MASTER

BAL Rating: N/A.
Rev No.: DA 01
Job No.: 5096
Dwn No.: 2.04

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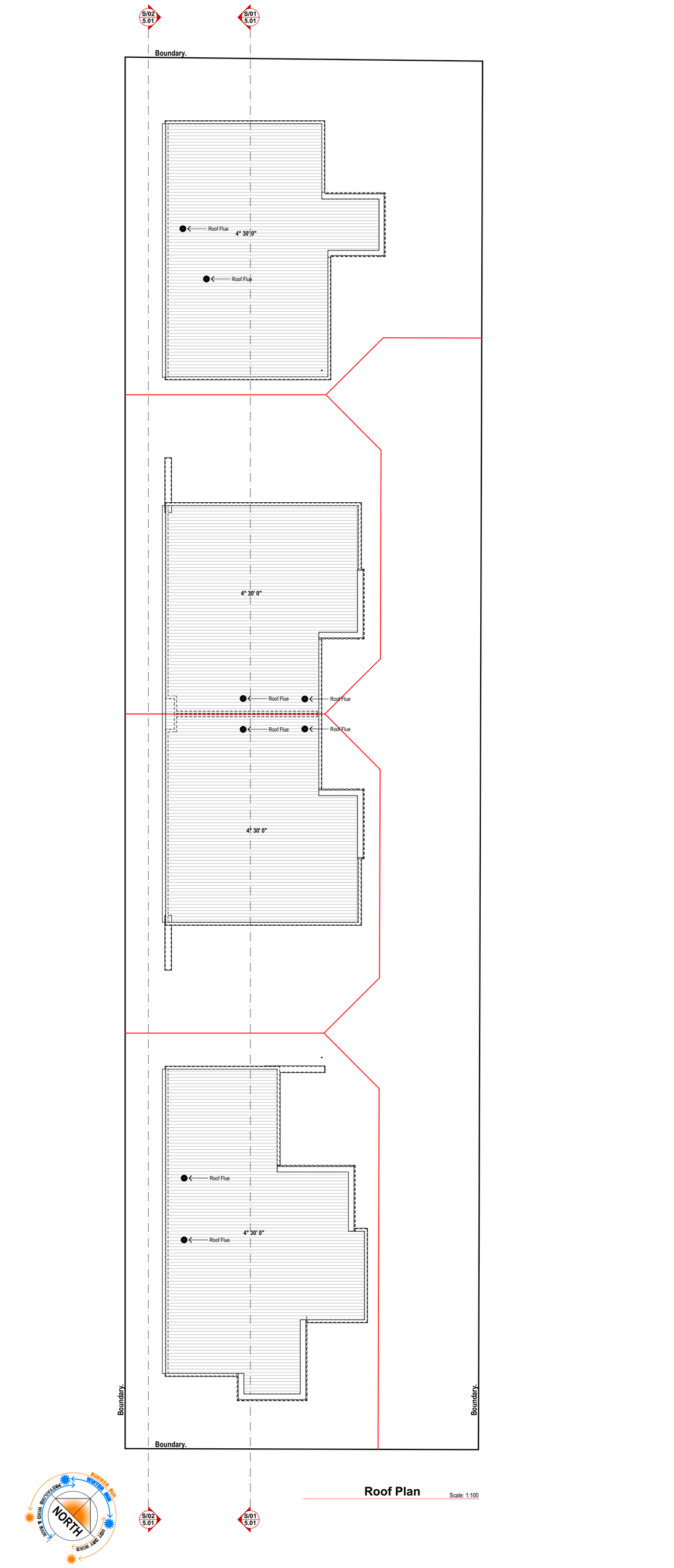
A: Suite 44 Cottesloe Central Shopping Centre, 460 Stirling Highway, Peppermint Grove, WA 6011
T: 08 9284 4866 F: 08 9284 6144 E: reception@riverstone.com.au
W: www.riverstone.com.au

Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

Wind Classification T.B.C.
Local Authority City of Vincent
Dwn. S.McChesney
Plot Date: 10/06/2022 at 9:37 AM
Amendments: DA01-

Signatures:
Client:
Client:
Builder:

X X



Roof Plan Scale: 1:100

LEGEND

- (S) Smoke Alarm - Hard Wired, Interlinked and to AS 3786-2014
- Exhaust fan - flumed to external air and not into the roof space.
- Wall mounted cold water hose tap
- Water supply for fridge
- Gas bayonet point

COMPLIANCE NOTES

Artificial Lighting | To comply with NCC Vol. 2 Part 3.12.5.5

Fall Prevention | Bedroom windows - where floor is 2m more than surface beneath unless opening sash is greater than 1700mm AFL opening must be permanently restricted to 125mm or fitted with a non-removable robust screen.
All other windows - where the fall height is 4m or greater must have a transom above 865mm and a sill height less than 150mm - No restriction is required to opening.
Refer to NCC V2 Part 3.9.2.6 and 3.9.2.7

Boundary Walls To Provide Fire Seperation | To comply with NCC Vol.2 Part 3.7.3.2

Fireplace | To comply with NCC Vol.2 Part 3.10.7

Parapet/Boundary Fireproofing | To comply with NCC Vol.2 Part 3.7.2.4

Staircase, Balustrade and Handrails | To comply with NCC Vol. 2 Part 3.9.1 and 3.9.2 (Nom. 280 Going x 172 Riser).

Stormwater Drainage | To comply with NCC V2 Part 3.1.3 citing AS 3500.3

Swimming Pool Barriers | To comply with AS 1926.1 and 1926.2

Timber Framing | To comply with AS 1684

Termite Protection | All primary building elements used for the construction of this building will consist entirely of, or a combination of, materials considered not subject to termite attack. Specifically, all timbers used in this dwelling will be preservative treated in accordance with AS 3660.1 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1.

Parapet Walls | FMC Homeguard as physical Termite barrier as per AS 3660.1 - 2014 and will comply with Part 3.1.4.2 of the Buidling Code of Australia - Volume 2, 2019 Amendment 1

Wet areas | To comply with NCC Vol.2 Part 3.8.1

Steelwork | Exposed steel shall have an anti-corrosive treatment in accordance with the NCC 2019

CITY OF VINCENT
RECEIVED
14 September 2022

Plans - MASTER

BAL Rating: N/A.
Rev No.: DA 01
Job No.: 5096
Dwn No.: 2.05

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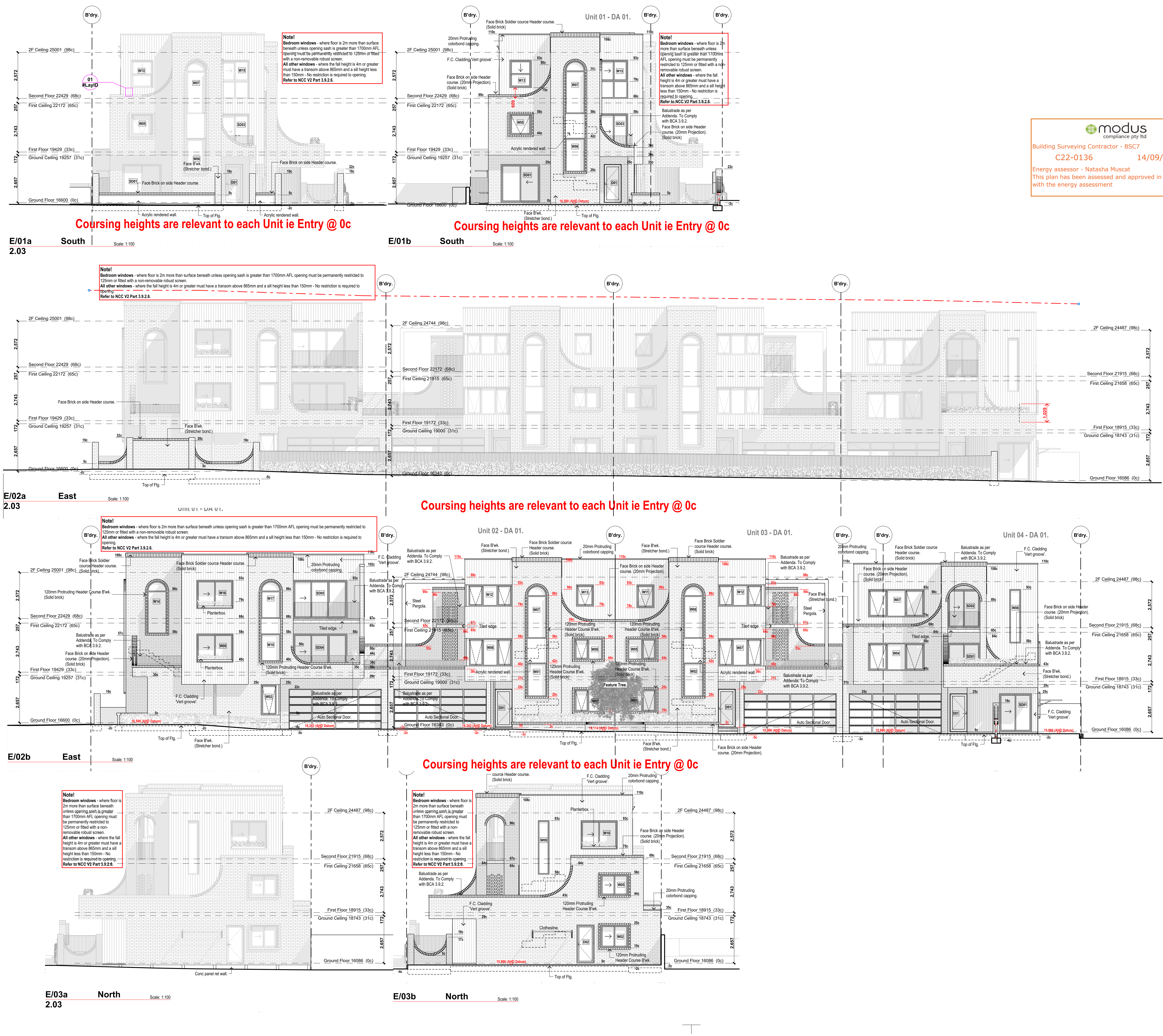
T: 08 9284 4866 F: 08 9284 6144 E: reception@riverstone.com.au
W: www.riverstone.com.au

Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

Wind Classification: T.B.C.
Local Authority: City of Vincent
Dwn.: S.McChesney
Plot Date: 10/06/2022 at 9:37 AM
Amendments. DA01-

Signatures:
Client:
Client:
Builder:



Planning Doc's

modus compliance pty ltd
Building Surveying Contractor - BSC7
C22-0136 14/09/2022
Energy assessor - Natasha Muscat
This plan has been assessed and approved in conjunction with the energy assessment

CITY OF VINCENT
RECEIVED
14 September 2022

Elevations - MASTER

BAL Rating: N/A.
Rev No. DA 01
Job No. 5096
Dwn No: 4.01

Signatures: Client: Client: Builder:

Wind Classification T.B.C.
Local Authority City of Vincent
Dwn. S.McChesney
Plot Date: 10/06/2022 at 9:37 AM
Amendments. DA01-

Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

RIVERSTONE
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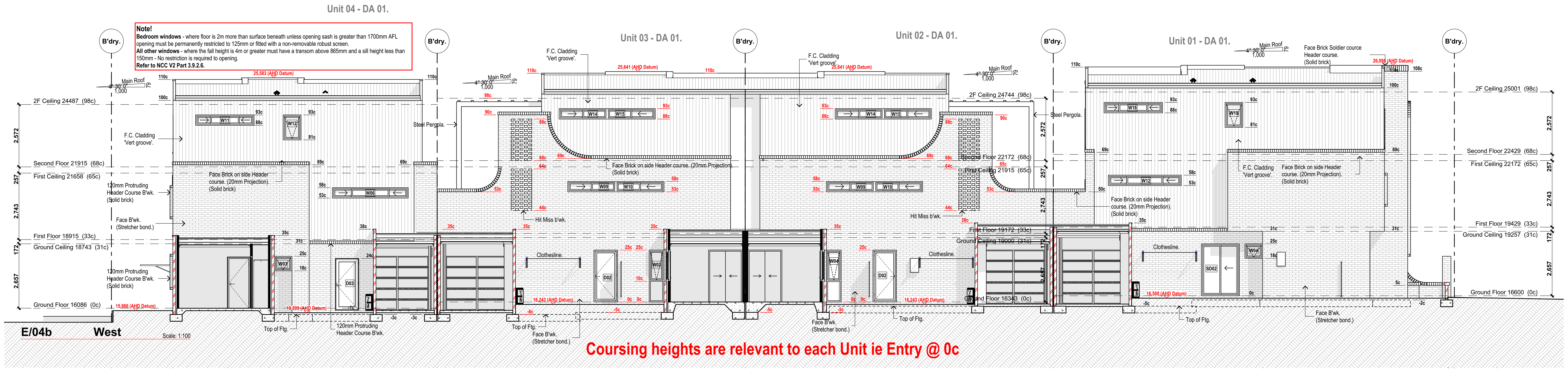
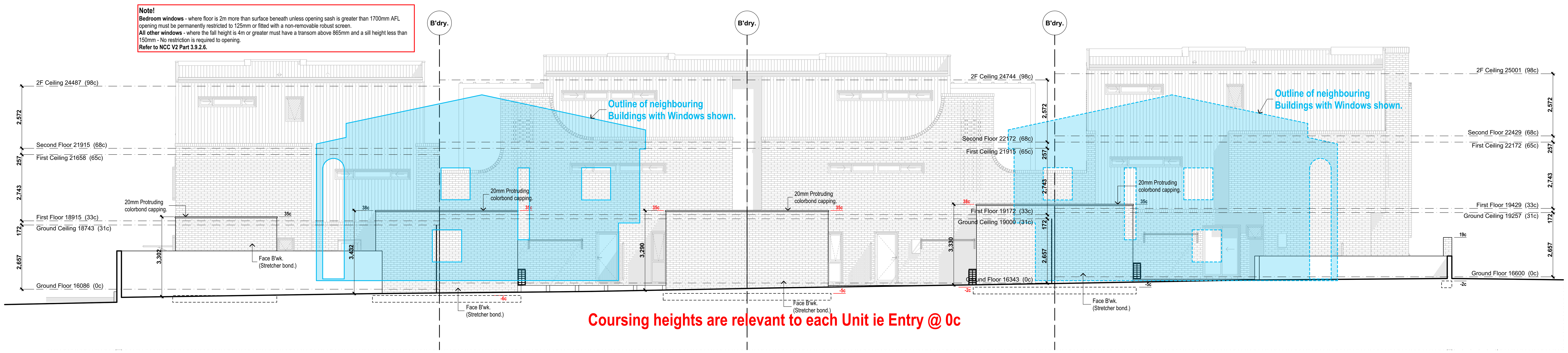

Unit 04 - DA 01.
Unit 03 - DA 01.
Unit 02 - DA 01.
Unit 01 - DA 01.
B'dry.
Note!
Bedroom windows - where floor is 2m more than surface beneath unless opening sash is greater than 1700mm AFL opening must be permanently restricted to 125mm or fitted with a non-removable robust screen.
All other windows - where the fall height is 4m or greater must have a transom above 865mm and a sill height less than 150mm - No restriction is required to opening.
Refer to NCC V2 Part 3.9.2.6.
2F Ceiling 24487 (98c)
Second Floor 21915 (68c)
First Ceiling 21658 (65c)
First Floor 18915 (33c)
Ground Ceiling 18743 (31c)
Ground Floor 16086 (0c)
2F Ceiling 24744 (98c)
Second Floor 22172 (68c)
First Ceiling 21915 (65c)
First Floor 19172 (33c)
Ground Ceiling 19000 (31c)
Ground Floor 16343 (0c)
2F Ceiling 25001 (98c)
Second Floor 22429 (68c)
First Ceiling 22172 (65c)
First Floor 19429 (33c)
Ground Ceiling 19257 (31c)
Ground Floor 16600 (0c)
Main Roof
F.C. Cladding 'Vert groove'.
Face Brick on side Header course. (20mm Projection). (Solid brick)
120mm Protruding Header Course B'wk. (Solid brick)
Face B'wk. (Stretcher bond.)
Steel Pergola.
Hit Miss b'wk.
Clothesline.
Face Brick Soldier course Header course. (Solid brick)
Top of Ftg.
Coursing heights are relevant to each Unit ie Entry @ 0c
E/04b West
Scale: 1:100


B'dry.
Note!
Bedroom windows - where floor is 2m more than surface beneath unless opening sash is greater than 1700mm AFL opening must be permanently restricted to 125mm or fitted with a non-removable robust screen.
All other windows - where the fall height is 4m or greater must have a transom above 865mm and a sill height less than 150mm - No restriction is required to opening.
Refer to NCC V2 Part 3.9.2.6.
Outline of neighbouring Buildings with Windows shown.
20mm Protruding colorbond capping.
Face B'wk. (Stretcher bond.)
Coursing heights are relevant to each Unit ie Entry @ 0c

E/04a West
2.03
Scale: 1:100

modus compliance pty ltd
Building Surveying Contractor - BSC7
C22-0136 14/09/2022
Energy assessor - Natasha Muscat
This plan has been assessed and approved in conjunction with the energy assessment

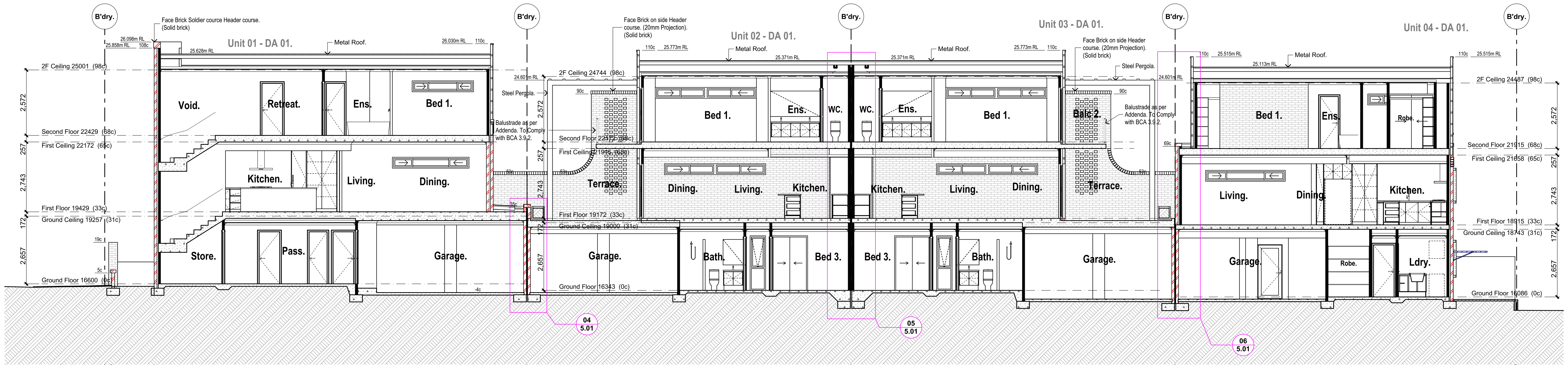
CITY OF VINCENT
RECEIVED
14 September 2022

Elevations - MASTER
DA 01
5096
4.02
N/A.

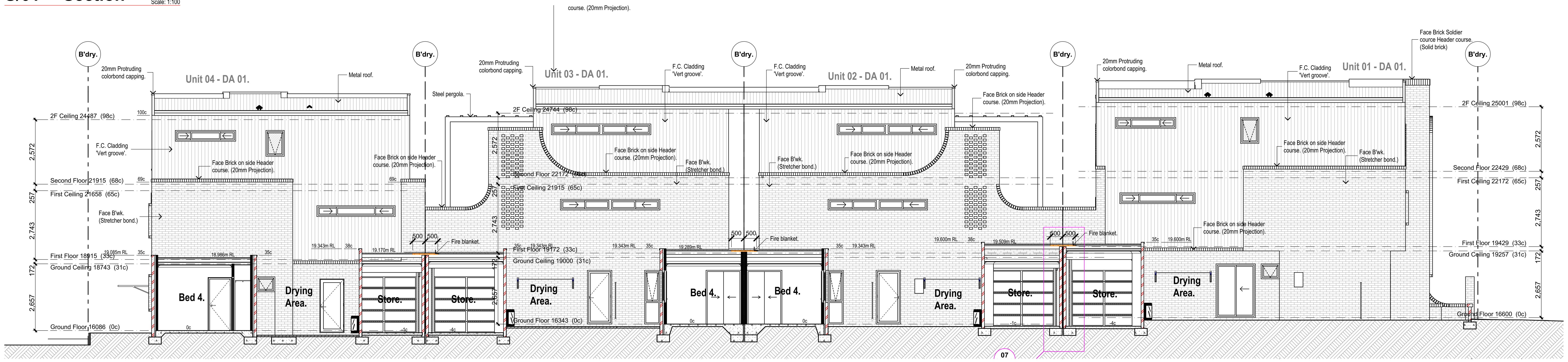
Tam-Palmerston ST
Lot 100, (#109), Palmerston St
Perth, WA 6000

RIVERSTONE

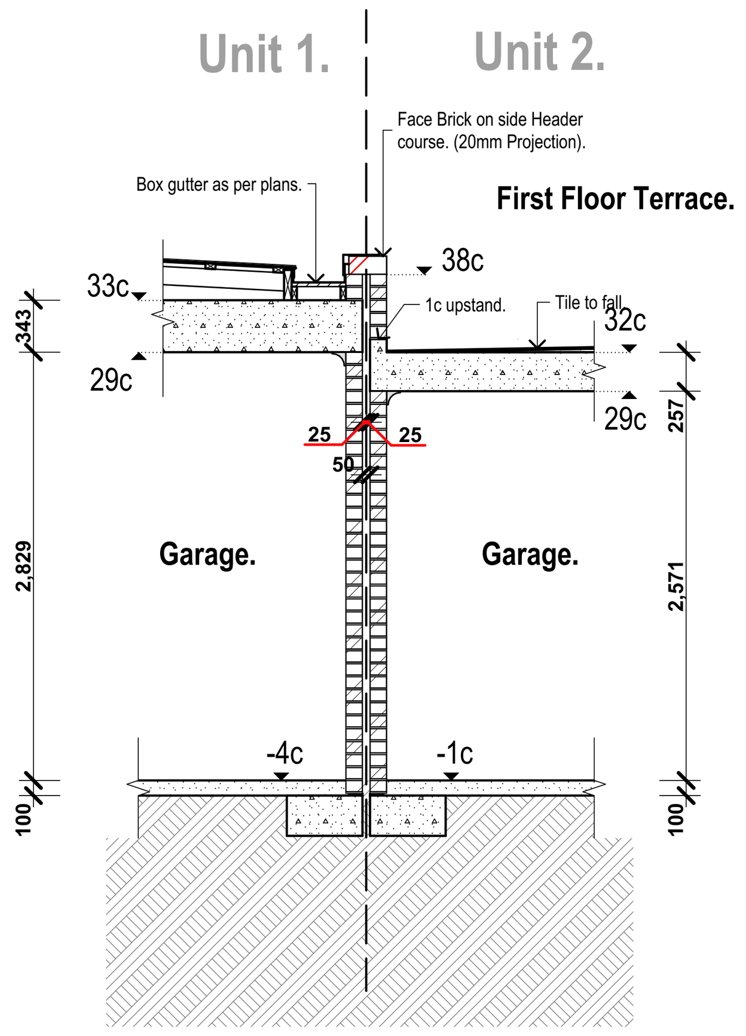
Planning Doc's



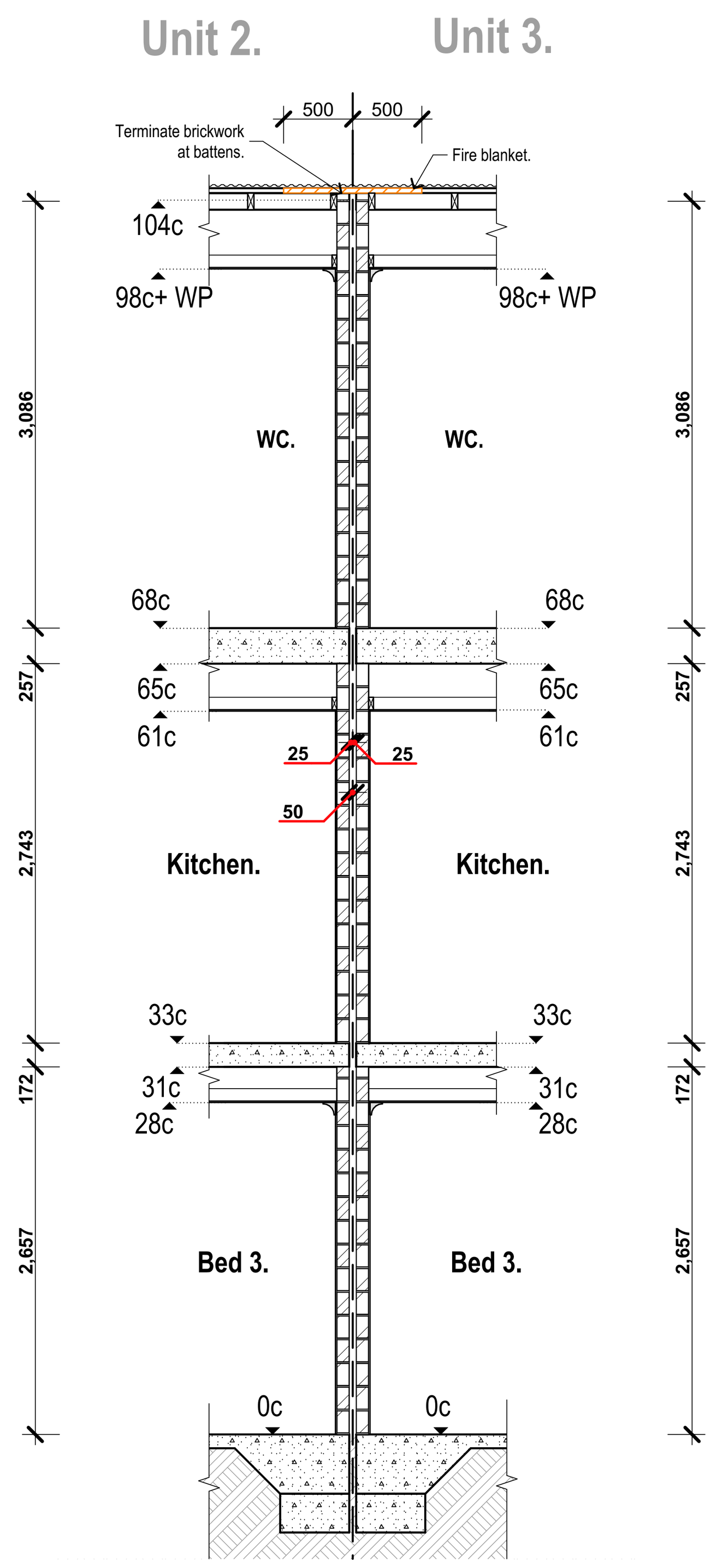
S/01 Section Scale: 1:100



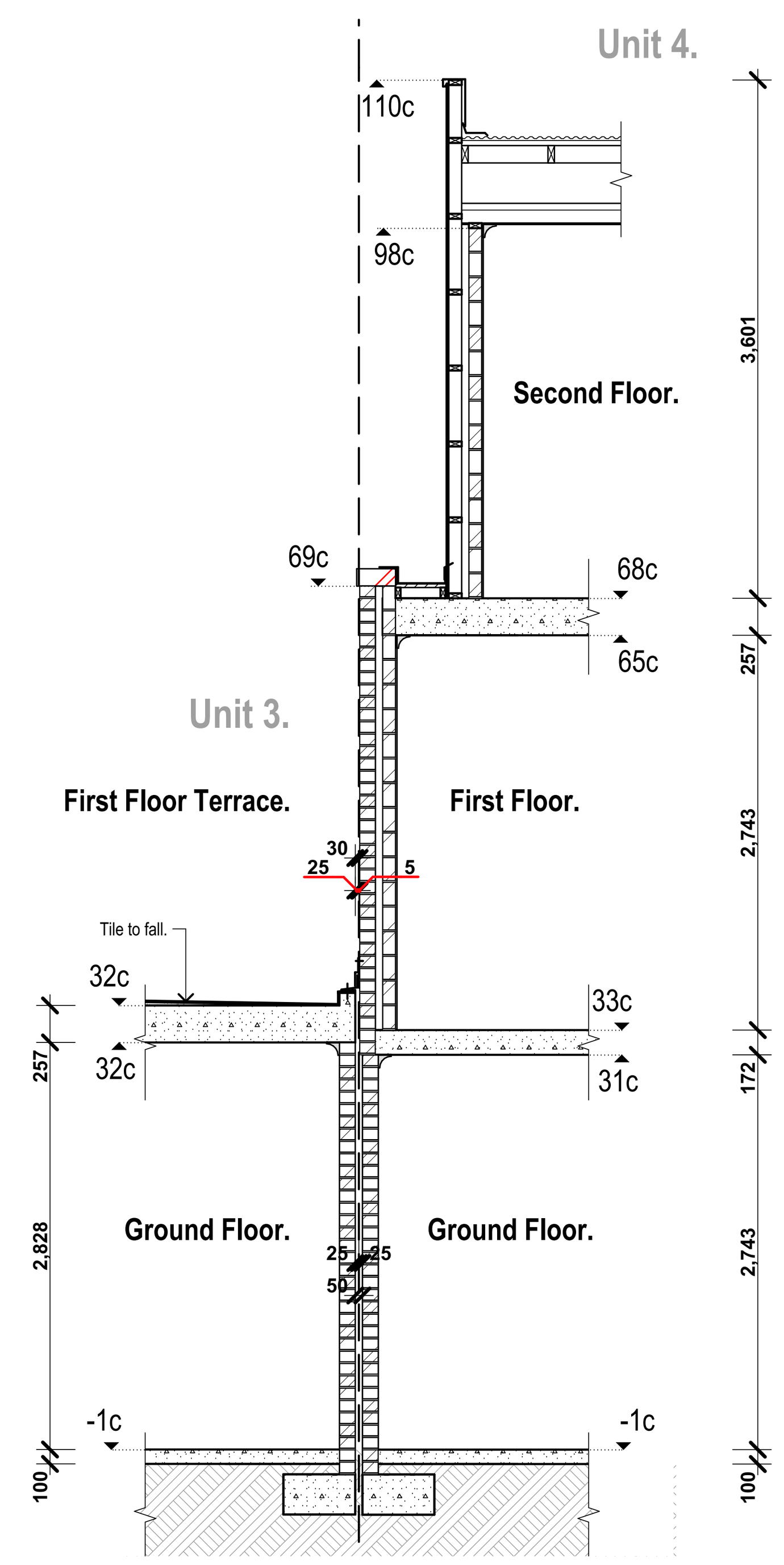
S/02 Section Scale: 1:100



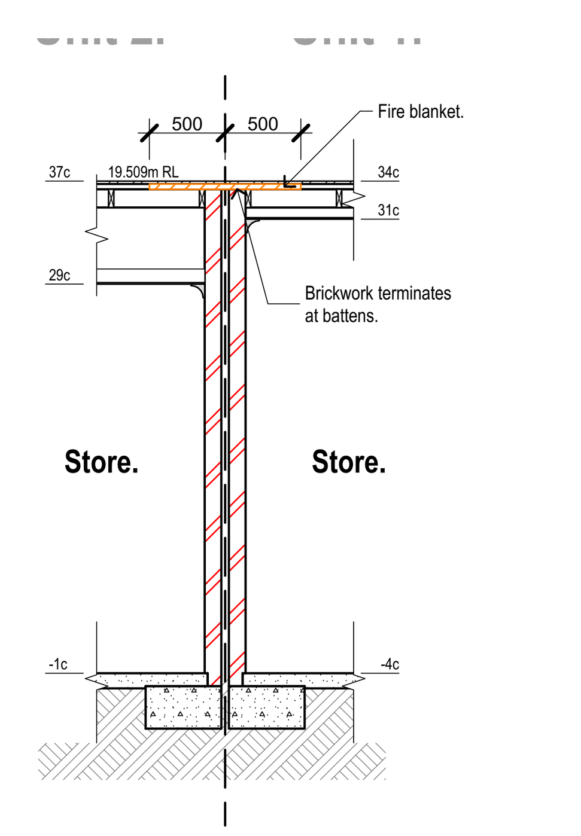
Boundary wall 1/2 Scale: 1:50



Boundary wall 2/3 Scale: 1:50



Boundary wall 3/4 Scale: 1:50



Store Boundary Wall 1/2 Scale: 1:50

modus compliance pty ltd
Building Surveying Contractor - BSC7
C22-0136 14/09/2022
Energy assessor - Natasha Muscat
This plan has been assessed and approved in conjunction with the energy assessment

CITY OF VINCENT
RECEIVED
14 September 2022

This Drawing is to be read in conjunction with all relevant Drawings related to the Project for accurate co-ordination of services. The Contractor is to check all dimensions on site before the commencement of work. Should any discrepancies occur, notify the Builder immediately. These Drawings remain the property of the Builder and shall be returned upon request.

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Tam-Palmerston ST
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Perth, WA 6000

Wind Classification: T.B.C.
Local Authority: City of Vincent
Dwn.: S.McChesney
Plot Date: 10/06/2022 at 9:37 AM
Amendments: DA01-

Sections - MASTER

BAL Rating.	Rev No.	Job No.	Dwn No :
N/A.	DA 01	5096	5.01

Planning Doc's