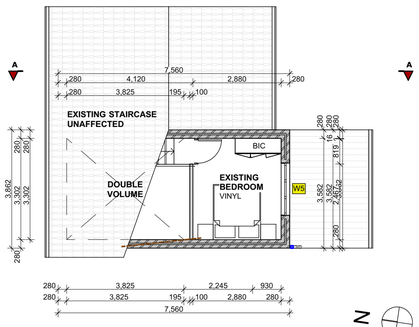
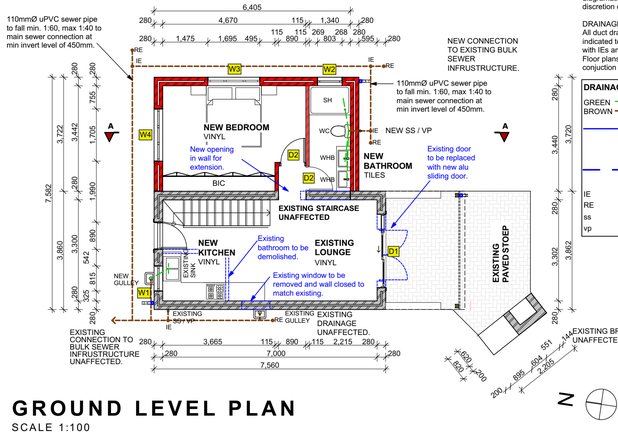


FIRST LEVEL PLAN

SCALE 1:100



GROUND LEVEL PLAN

SCALE 1:100

NOTES:

CIVIL

All civil work e.g. site levels, shaping, retaining walls/structures paving layouts/substrates and storm water run-off/distribution as per Civil Engineers design and specifications.

STRUCTURE

All structural work strictly as per Structural Engineers design and specifications. Any discrepancies between Architectural and Structural drawings to be reported immediately

PAVING

Substrate and stormwater run-off as per Civil Engineers specification.

GAS INSTALLATION NOTES:

Gas installation as per registered gas installer to be used and to provide Certificate of Conformity on completion. All occupancy penetrations and service crossing / parallel runs to gas lines as per Mech Engineers specification. All installations and piping to comply with the requirements of the Occupational Health and Safety Act (Act 85 of 1993) and SANS 10087-1.

Gas bottles may not be installed:
• Less than 1 metre sideways from doors and windows.
• Less than 2 metres from drains and air vents.
• Less than 3 metres below windows (unless a non-combustible roof is installed)
• Less than 3 metre from the property boundary wall (unless it is a fire wall)
• Less than 5 metres sideways away from a switchable electric point or plug switch;
• Light bulbs cannot be less than 1.5 metres above a gas bottle.

HANDRAILS:

Max spacing of all horizontal and vertical members 100mm.
All as per SPECIALIST DESIGN, SUPPLY AND INSTALLATION to comply with SANS 10400 Part B and SANS 10610-2:2010 Part 2. Certificate of conformity to all SANS requirement to be provided on completion.

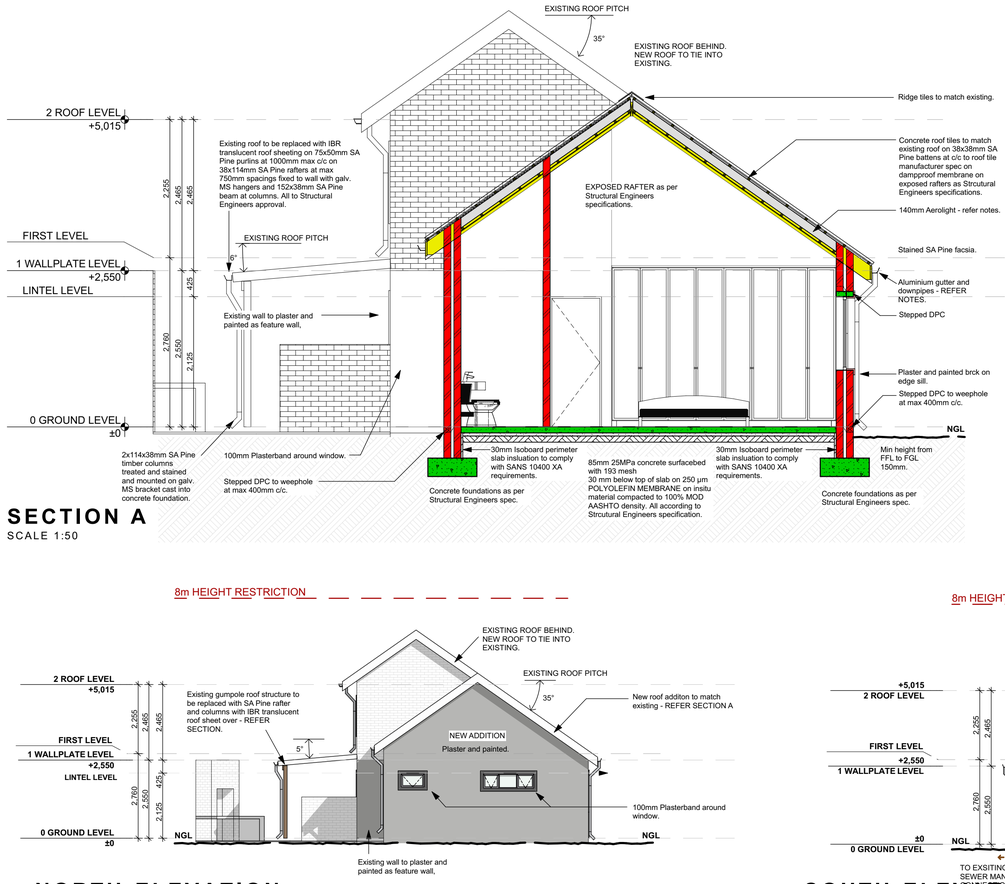
PLUMBING AND DRAINAGE

All plumbing and drainage indicated are diagramatical only and subject to the plumbers discretion of the final layout on site.

DRAINAGE PIPES
All duct drainage pipes on floor plans indicated to connect to bulk drainage lines with IEs and REs as indicated on Site Plan. Floor plans drainage layouts to be read in conjuction with Site Plan.

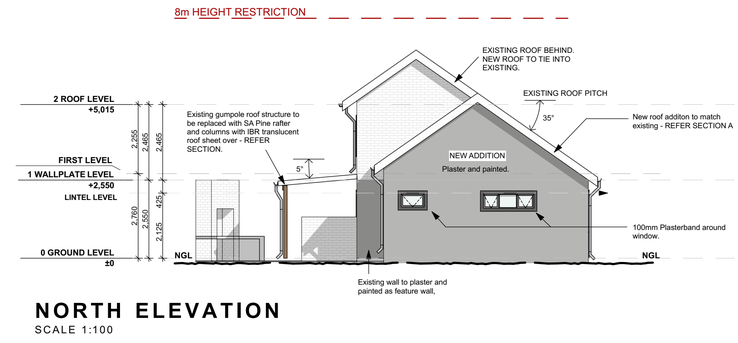
DRAINAGE LEGEND:

GREEN ———	50mm Ø UPVC Drain Pipe
BROWN – – –	110mm Ø UPVC Drain Pipe
	Main water supply to building. Sizing to be determined by plumber on site as required for all sanware fittings.
	Sleeve fore site water points - points to be confirmed.
IE	Inspection Eye
RE	Rodding Eye
ss	Sub stack
vp	Vent pipe



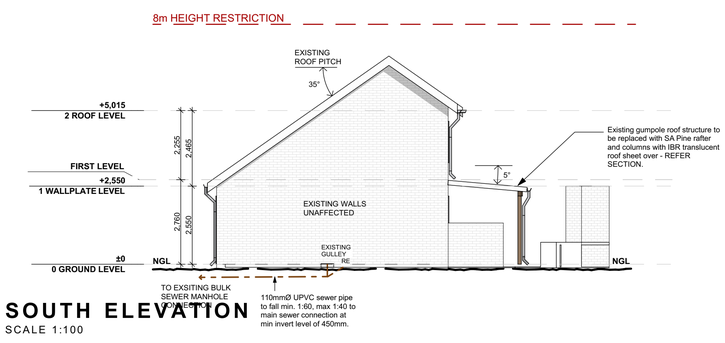
SECTION A

SCALE 1:50



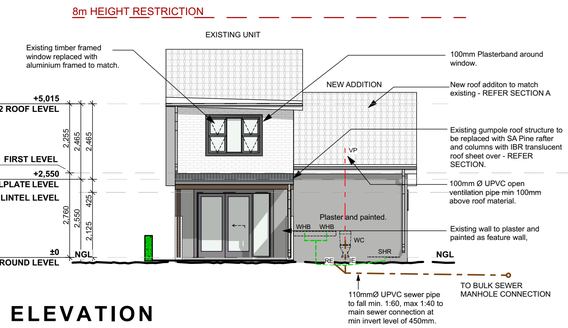
NORTH ELEVATION

SCALE 1:100



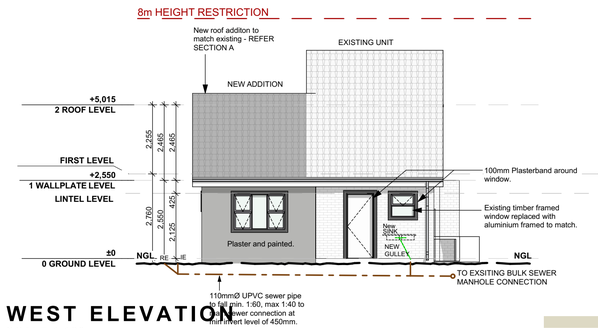
SOUTH ELEVATION

SCALE 1:100



EAST ELEVATION

SCALE 1:100



WEST ELEVATION

SCALE 1:100

Table 4 — Area weighted average maximum whole fenestration element performance values for vertical fenestration

1	2	3		
Total fenestration area for each storey/unit floor area for each storey (%)	U-Value (W/m²K)	Maximum solar heat gain coefficient (SHGC)		
		Vertical fenestration with West, North-West, North, North-East and East sector orientation (see figure 2)		Vertical fenestration with South-West, South and South-Eastern orientation (see figure 2)
		With shading in accordance with 5.2.2	With no shading or not in accordance with 5.2.2	All
≤ 20 %	Any solution	Any solution	Any solution	Any solution
≤ 25 %	5,20	0,66	0,49	Any solution
≤ 30 %	4,40	0,53	0,44	Any solution
≤ 35 %	3,80	0,49	0,40	Any solution
≤ 40 %	3,30	0,44	0,35	Any solution
≤ 45 %	3,00	0,40	0,33	Any solution
≤ 50 %	2,60	0,35	0,30	Any solution
≤ 55 %	2,40	0,33	0,28	Any solution
≤ 60 %	2,20	0,30	0,25	Any solution
>60 %	2,00	0,28	0,22	Any solution

Hot Water Services

Occupancy Class Type	Dwelling houses - Low rental : 80-115 L/capita/day	
Estimated Hot Water Consumption	75.0	L
No. of Persons:	4	Per Day/ 24
Assumed Daily Hot Water Consumption:	300.0	L

(Daily Hot Water Consumption x Occupancy design days x x5s weeks of the year)/1000 = Hot water Consumption (Kl.a)

Assumed Annual Hot Water Consumption:	109.20	KL
50 % of Annual Hot Water Consumption:	54.60	KL - gas?

CONCLUSION

Dwelling to be provided with min: 150.0 L – **Water vesel: Electrical & Solar heating system combination**
OR
Alternative means other than electrical resistance heating, including, but not limited to, solar heating, heat pumps, heat recovery from other systems or processes.

Thermal Insulation Requirements

Internal diameter of Hot Water Service Pipe	≤ 80	mm
Minimum Required *R*-value for Pipe Insulation	1.0	Refer SANS 204 (4.5.2)

Hot Water Vessels

Minimum Required *R* -value for Vessel	2.0	Additional insulation to manufacturer's insulation may be required to achieve this value.

ROOF: Design

Roofs Assembly

SANS 10400-XA — **Min. Required R-value**

Minimum Total *R*-value required	3.70	m² K/W
Direction of heat flow	Up	

Obtained R-value

Roof Covering Material	Clay tile type	
Roof covering material *R*-value	0.35	m² K/W
Ceiling *R*-value	0.05	m² K/W
Total obtained R-value	**0.40**	m² K/W

Min R-Value NOT Achieved, Refer to SANS 204

SANS 204

Obtained R-value

Is Roof vented	Unventilated	
Type roof construction	Conc./clay tile @ 22-45° pitch w/ cathedral/open beam ceiling	
R-value for Roof		
Heat flow Direction	**UP**	
Moving Air (7m/s)	**0.03**	
Roof tile, clay or concrete(1922 kg/m³)	**0.02**	
xd air space(30 mm to 100 mm, non-reflective)	**0.1**	
Plasterboard, gypsum(10 mm, 880 kg/m³)	**0.08**	
Unventilating Air	**0.11**	
Total Obtained R-value	**0.32**	m²K/W

Min R-Value NOT Achieved: Thermal Insulation Require

Thermal Insulation **SANS 204**

Insulation product to be installed	Flexible fibre glass blanket		See SANS 204 (4.3.6.2)
Density of insulation to be installed	10 – 18	kg/m³	
Min. Thickness of insulation to be installed	140.00		mm
Insulation required with minimum R-Value	3.38		m²K/W

RECOMMODATION
It is recommended that a Flexible fibre glass blanket with a thickness of 140 mm needs to be installed in order to achieve the min. additional R-value of 3.38 m2K/W

FENESTRATION: Design

Buildings with Natural Environmental Control

Fenestration Constants

Conductance (C_U) constant	1.40
Solar Heat Gain (C_{SHGC}) constant	0.13

SANS 10400XA COMPLIANCE

Ground Storey

Net Floor Area of Storey / Room:	m²	47.000
Fenestration Area of Storey / Room:	m²	8.954
% Fenestration Area to Nett Floor Area:	%	19.050

COMPLY: Refer Table 4 above.

First Storey

Net Floor Area of Storey / Room:	m²	10.000
Fenestration Area of Storey / Room:	m²	2.046
% Fenestration Area to Nett Floor Area:	%	20.460

COMPLY: No further calculation required. Refer Table 4 above. Existing timber replaced with smaller aluminium window.

Storey Level	Gazing Ref	Quantity	Width (m)	Height (m)	Area
Ground Storey	D1	1	2.4	2.08	4.992
Ground Storey	W1	1	0.815	0.795	0.647925
Ground Storey	W2	1	0.805	0.48	0.3864
Ground Storey	W3	1	1.695	0.52	0.8814
Ground Storey	W4	1	1.705	1.2	2.046
First Storey	W5	1	1.705	1.2	2.046
----------	0	0	0	0	
----------	0	0	0	0	

AREA SCHEDULE UNIT G 170 **REV 0**

SITE AREA:	92 358m²
EXISTING COVERAGE ACTUAL:	17 270m²
NEW COVERAGE	
G169	34m²
G168	32m²
G176	6m²
G170	25m²
NEW TOTAL	17 342m²

GROSS BUILDING AREA:

INCLUDED:
EXTERNAL WALL AREA
STAIR AND DOUBLE VOLUME CALCULATED ONCE

GROUND LEVEL

EXISTING	29m²
NEW (COVERAGE)	25m²
FIRST LEVEL	
EXISITNG	13m²
COVERED PATIO	10m²
TOTAL EXISTING GBA	52m²
TOTAL NEW GBA:	25m²
NEW TOTAL GBA:	77m²

NETT FLOOR AREA:

MEASURED TO INSIDE OF EXTERNAL WALLS

GROUND LEVEL	46m²
FIRST LEVEL	10m²
TOTAL GFA:	**56m²**

GENERAL NOTES

* All building work to comply with SABS 0400
* No dimensions to be scaled or scanned from drawing
* All dimensions to be checked on site before any work is put to hand.
* Where applicable the contractor is to check on site the size of components to be manufactured prior to installation
* Contractor is responsible for correct setting out of the buildings. all external and internal walls with particular reference to boundaries, building lines, etc.
* Contractor to verify all levels, heights and dimensions on site and to check the same against the drawings before putting any work in hand.
* Contractor is to locate and identify existing services on the site and protect these from damage throughout the duration of the works.
* Any errors, discrepancies or omissions to be reported immediately.
* Contractor is to build in approved 4 ply D.P.C. weather or not these are shown on drawings, to all walls at each floor, beam or parapet level and to all windows, doors, grilles or other openings in external walls.
* Any queries arising from all the above must be reported and clarified before any works is put in hand.
* This drawing to be read in conjunction engineers drawings when applicable.

DRAINAGE NOTES

* All plumbing and drainage work and installation of sanitary fittings to comply with the relevant Local Authority by-laws, regulations and requirements.
* Provide I.E. 's to all bends and junctions with suitable markers at ground level and to be fully accessible at all times.
* Minimum 1:60 fall to all drain pipes.
* Provide approved reseal traps to all waste fittings
* Provide A.E. 's to foot of all soil stacks.
* All soil pipes passing under buildings or footings to be protected against loads.

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* The client accept the responsibility of materials, content and statement.
* The elements shown on this drawing are prototypical design only, They implemented in part, or in whole, in any structure without notification and written approval being issued by arcxl architects.

REGISTERED OWNER DETAILS:	DATE: 6/12/2023
	SIGNATURE OF OWNER/ CLIENT:

REGISTERED ARCHITECT DETAILS:	DATE: 6/12/2023
SORINA VAN DEVENTER ARCXL ARCHITECTS SACAP REG NO: 6641 GEORGE / MOSSEL BAY PO BOX 13258 Garden Route Mall 6546	SIGNATURE OF ARCHITECT:

REVISIONS

REV 0	6/12/2023	1.-

DRAWING STATUS

MUNICIPAL SUBMISSION

PROJECT TITLE

PROPOSED ALTERATIONS AND ADDITIONS TO UNIT G 170 TIPE C

FOR THE

PROPOSED NEW RETIREMENT RESORT PTN 41 THE FARM RONDE VALLEY 187 SEDGEFIELD

DRAWING DESCRIPTION

NIT G 170 LAYOUTS REV

SCALE	AS SHOWN
DATE	DATE OF 1ST ISSUE
ISSUED	19-03-2021
DRAWN BY	Andrew Schenk
CHECKED BY	Andrew Schenk
ARCHITECT	Andrew Schenk

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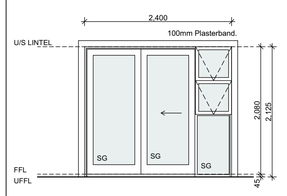
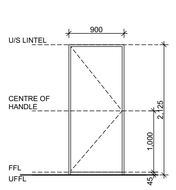
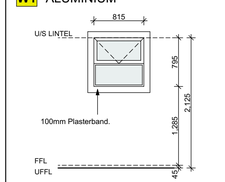
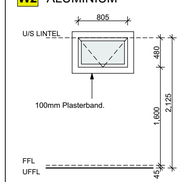
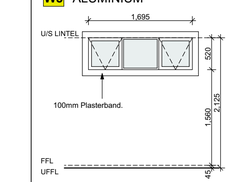
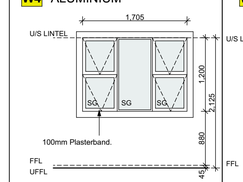
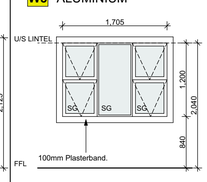
PROJECT NO:	DRAWING NO:	REVISION
2226	05	0

DOOR SCHEDULE SCALE 1:50	D1 ALUMINIUM	D2 TIMBER - SEMI-SOLID
	SG = SAFETY GLASS	
DIMENSIONS OF OPENINGS TO BE CHECKED ON SITE BEFORE MANUFACTURING ALL GLAZING, WINDOW FRAMES AND INSTALLATION TO COMPLY TO AAAMSA & SABS STANDARDS		
DOOR TYPE	Aluminium framed sliding door.	SEMI-SOLID timber masonite door with timber frame.
DOOR	Aluminium framed sliding door.	44mm thick semi-solid flush panel masonite door.
DOOR FRAME	As per door frame section requirements.	Hardwood timber frame to fit door.
FINISH	Powder coated. Colour: CHARCOAL.	As per Paint Specialist specification.
GLAZING	REFER XA CALCULATION TABLE	N / A
IRONMONGERY	To client requirements.	To client requirements.

WINDOW SCHEDULE SCALE 1:50	W1 ALUMINIUM	W2 ALUMINIUM	W3 ALUMINIUM	W4 ALUMINIUM	W5 ALUMINIUM
	SG = SAFETY GLASS				SG = SAFETY GLASS
DIMENSIONS OF OPENINGS TO BE CHECKED ON SITE BEFORE MANUFACTURING ALL GLAZING, WINDOW FRAMES AND INSTALLATION TO COMPLY TO AAAMSA & SABS STANDARDS					
WINDOW TYPE	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.
WINDOW	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.	Aluminium top hung section as per aluminium manufacturer.
WINDOW FRAME	Approved aluminium frame. Minimum section size 40mm.	Approved aluminium frame. Minimum section size 40mm.	Approved aluminium frame. Minimum section size 40mm.	Approved aluminium frame. Minimum section size 40mm.	Approved aluminium frame. Minimum section size 40mm.
FINISH	Powder coated. Colour: CHARCOAL.	Powder coated. Colour: CHARCOAL.	Powder coated. Colour: CHARCOAL.	Powder coated. Colour: CHARCOAL.	Powder coated. Colour: CHARCOAL.
GLAZING	REFER XA CALCULATION TABLE	REFER XA CALCULATION TABLE	REFER XA CALCULATION TABLE	REFER XA CALCULATION TABLE	REFER XA CALCULATION TABLE

PROPOSED NEW RETIREMENT RESORT PTN 41 THE FARM RONDE VALLEY 187 SEDGEFIELD