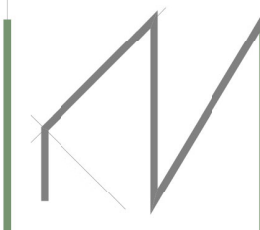


ERF 22083 MZURI



INNOVATIVE DESIGNS
ARCHITECTURAL DESIGNERS AND BUILDING CONTRACTORS
Unit 12 Cnr of Reitz & Victoria Road Somerset West
Gey van Pittius Building / Cell : 078 3901 663
Office : 085 1630 043 / info@id-designs.co.za
SACAP-PSAT43752054 /NHBC Reg -3000226340

LOCALITY MAP



GENERAL NOTES

- COPYRIGHT RESERVED BY THE ARCHITECTS.
- ALL INFORMATION ON THE PLAN MUST BE CHECKED AND ANY DISCREPANCIES MUST BE BROUGHT TO THE ARCHITECTS ATTENTION BEFORE ANY BUILDING WORK COMMENCES.
- DRAWINGS MUST NOT BE SCALED.
- ALL WORK AND QUALITY OF MATERIALS MUST COMPLY WITH SANS 10400 AND ALL OTHER APPROPRIATE AUTHORITIES.
- QUALITY OF WORKMANSHIP MUST BE STRICTLY IN ACCORDANCE WITH TH SANS BUILDING STANDARDS AND RELEVANT CONSTRUCTION INSTITUTES.
- FOUNDATION EXCAVATION MUST BE TREATED WITH APPROVED PERSON WITH A 10 YEAR GUARANTEE AND MUST BE APPLIED AS INDICATED ACCORDING TO BUILDING STANDARDS.
- CONCRETE FOUNDATION, SURFACE BED AND PAVING MUST COMPLY WITH SANS 10400 AS WELL AS ENGINEERS PLANS AND SPECIFICATIONS.
- WHERE ANY SURFACE DIFFERENCES IN STRIP FOUNDATIONS OCCUR THE HIGHEST SECTION MUST BE EXTENDED OVER THE LOWEST FOR A DISTANCE AS THICK AS THE FOUNDATION.
- FOUNDATION EXCAVATION FOR OUTSIDE BRICK WALLS MUST NOT BE LESS THAN 400MM UNDER THE SURFACE OF THE ADJOINING FINISHED GROUND LEVEL.
- 375 MICRON D.P.C. MUST BE PROVIDED IN ALL WALLS AS INDICATED.
- CORRECT WIDTH BRICKWORK MUST BE PROVIDED IN EACH FIFTH COURSE IN ALL BRICK WALLS, EXCEPT WHERE SHOWN OTHERWISE.
- ALL BRICK WORK IN STRETCHER BOND EXCEPT WHERE SHOWN OTHERWISE, L BRICK WORK IN STRETCHER BOND EXCEPT WHERE SHOWN OTHERWISE.
- ALL DRAIN PIPE EXCAVATIONS MUST BE TREATED WITH TERMITE POISON FOR 1500MM FROM ANY BUILDING.
- ALL GLAZING MUST BE ACCORDING TO THE SANS 10137 AND SANS 10400 PART 4 - ACCESS DOORS AND SIDE LIGHTS, WINDOWS LOWER THAN 500MM FROM FLOOR, WINDOWS LOWER THEN 1800MM ABOVE PITCH LINE OF STAIRS AND SHOP FRONTS TO BE SAFETY GLASS AND CLEARLY IDENTIFIED AS SUCH AT EYE LEVEL.
- ALL DRAIN PIPE WORKS AND MATERIAL MUST BE ACCORDING TO NBS REQUIREMENTS.
- ELECTRICAL INSTALLATIONS MUST BE STRICTLY ACCORDING TO APPROPRIATE REGULATIONS.
- ALL TIMBER ROOF TRUSSES MUST BE TREATED WITH TERMITE RESISTANT SUBSTANCE OR SIMILAR APPROVED.
- WALL TIES SHALL BE INSTALLED IN ANY CAVITY WALL IN AN EVENLY DISTRIBUTED PATTERN AT A RATE OF NOT LESS THAN 5 TIES PER SQ METER OF FACE AREA WHERE THE CAVITY IS MORE THAN 250MM IN WIDTH.
- ALL EXTERNAL WALLS TO BE 230 MM CAVITY WALLS WITH 50MM SPACING.
- PROVIDE WALL TIES 500MM AND BRICKWORK EVERY 3 COURSES.
- PROVIDE WEEPHOLES EVERY 6 BRICK COURSES.
- ALL PARAPET WALLS TO BE WATERPROOFED WITH SANDWICH FLASHING AND ACRYLIC SEAL.
- LOWER UP OR DPC TO BE 150MM FROM FGL AND CAVITY BELOW FILLED WITH CONCRETE.
- ALL INTERNAL AND EXTERNAL WALL OPENINGS LESS THEN 5M TO RECEIVE A PRE CAST CONCRETE LINTOL.
- ALL INTERNAL WALLS TO RECEIVE A 600X200MM CONCRETE SLAB THICKENING

AREAS

SITE	- 323 SQM
DWELLING	
GROUND FLOOR	-155 SQM
FIRST FLOOR	-100 SQM
BALCONY	- 15 SQM
TOTAL FOOTPRINT	- 165 SQM
TOTAL SQM	- 270 SQM
COVERAGE	- 51.53%

HOT WATER DEMAND

- MINIMUM OF 50% BY VOLUME OF ANNUAL AVERAGE HOT WATER HEATING REQUIREMENTS SUPPLIED BY ALTERNATIVE MEANS.
- HOT WATER CALCULATION FOR THE GROUND FLOOR: BEDROOM WING.
A. HA DWELLING OCCUPATION 2 PEOPLE PER BEDROOM X 3 BEDROOMS = 6 PEOPLE
B. USAGE PER PERSON PER DAY = 325 LITRES
C. HOUSEHOLD CONSUMPTION PER DAY AT 55 DEGREES C = 115 L/PER PERSON X 6 = 690 LITRES
D. STORAGE VOLUME AT 60 DEGREES CELSIUS = 50 LITRES/ PERSON X 6 = 300 LITRES
E. AMBIENT INPUT TEMPERATURE = 16 DEG. C
F. TARGET OUTPUT TEMPERATURE (DELIVERY TEMPERATURE) = 55 DEG. C
G. AVERAGE DIFFERENCE IN TEMPERATURE = 44 DEG. C
H. SPECIFIC HEATING OF LITRE OF WATER = 4.185 KJ/KG
I. DAILY ENERGY REQUIRED TO HEAT WATER = 690 L/ DAY X 44 X 4.185 = 125 965.50
J. KWH PER DAY = H DIVIDED BY 3600 = 63.482.76 / 3600 = 35.00 KWH
K. ENERGY REQUIREMENT TO HEAT WATER PA = 35.00 KWH X 365 DAYS = 12 775.00 KWH
50 % OF ENERGY REQUIRED TO HEAT WATER PER YEAR = 63 872.00 KWH
A. STORAGE CAPACITY = 200 LITRES
B. FLOW RATE = 12 - 14.5 L/MIN
C. HEATING CAPACITY = 4.2 KW
D. POWER CONSUMPTION = 1.3 KW
KWIK KOT GEYSER SAVES 70% OF ENERGY USAGE
HEAT PUMP ENERGY USAGE = LESS THAN 50% OF ENERGY REQUIRED = 3832.50 KWH
INSTALLATION COMPLEES.
HEATPUMP SPECIFICATION: 4.2 KW WITH 200 LITRE STORAGE CAPACITY.

PROJECT DETAILS

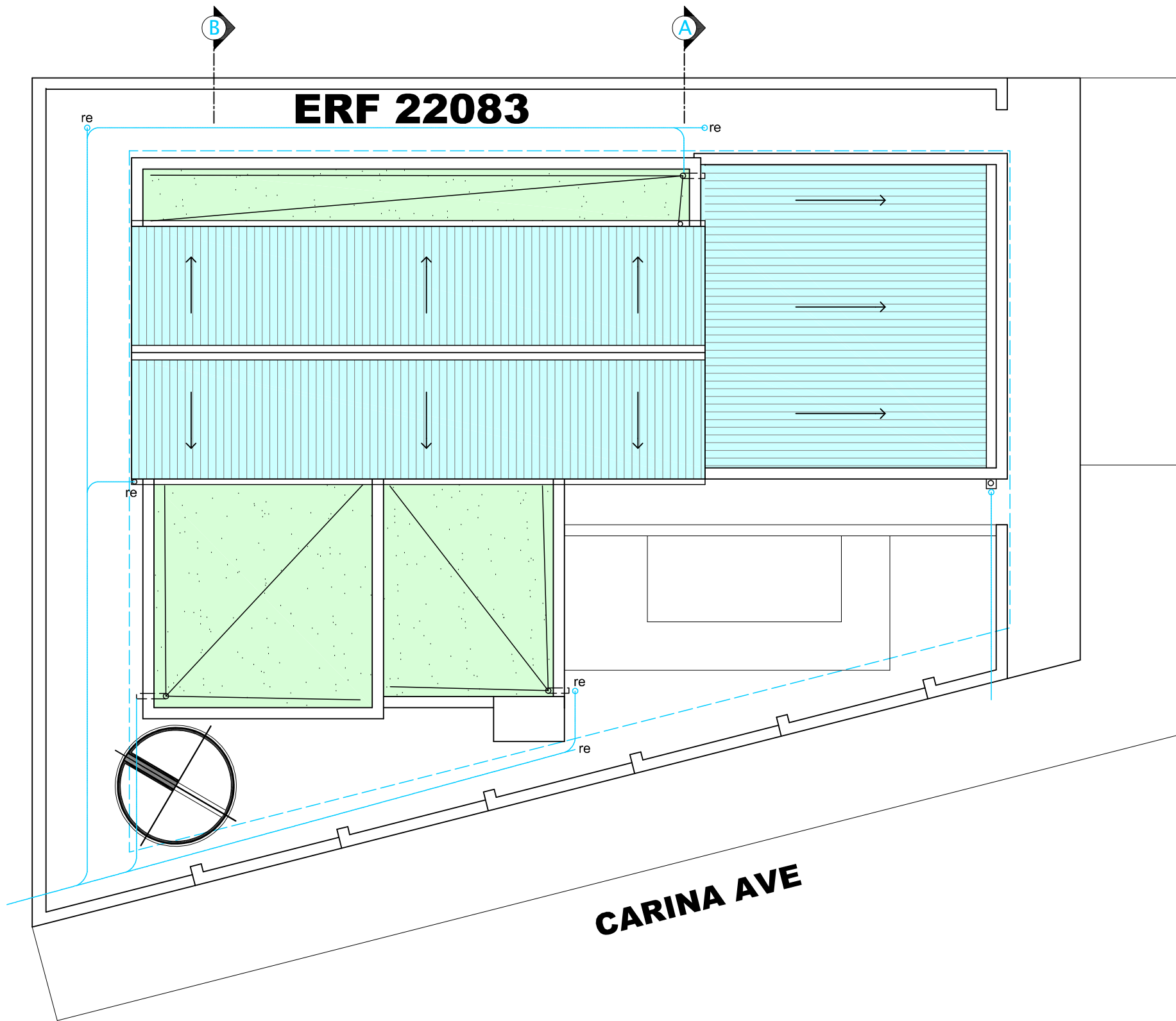
CLIENT: DE VOS
DISCRPTION: NEW DWELLING
LOCATION MZURI ESTATE MZURI AVE SOMERSET WEST

DRAWING DETAILS

TITLE FLOOR PLANS AND ROOF PLANS
PROJECT REF PROJECTS I 815

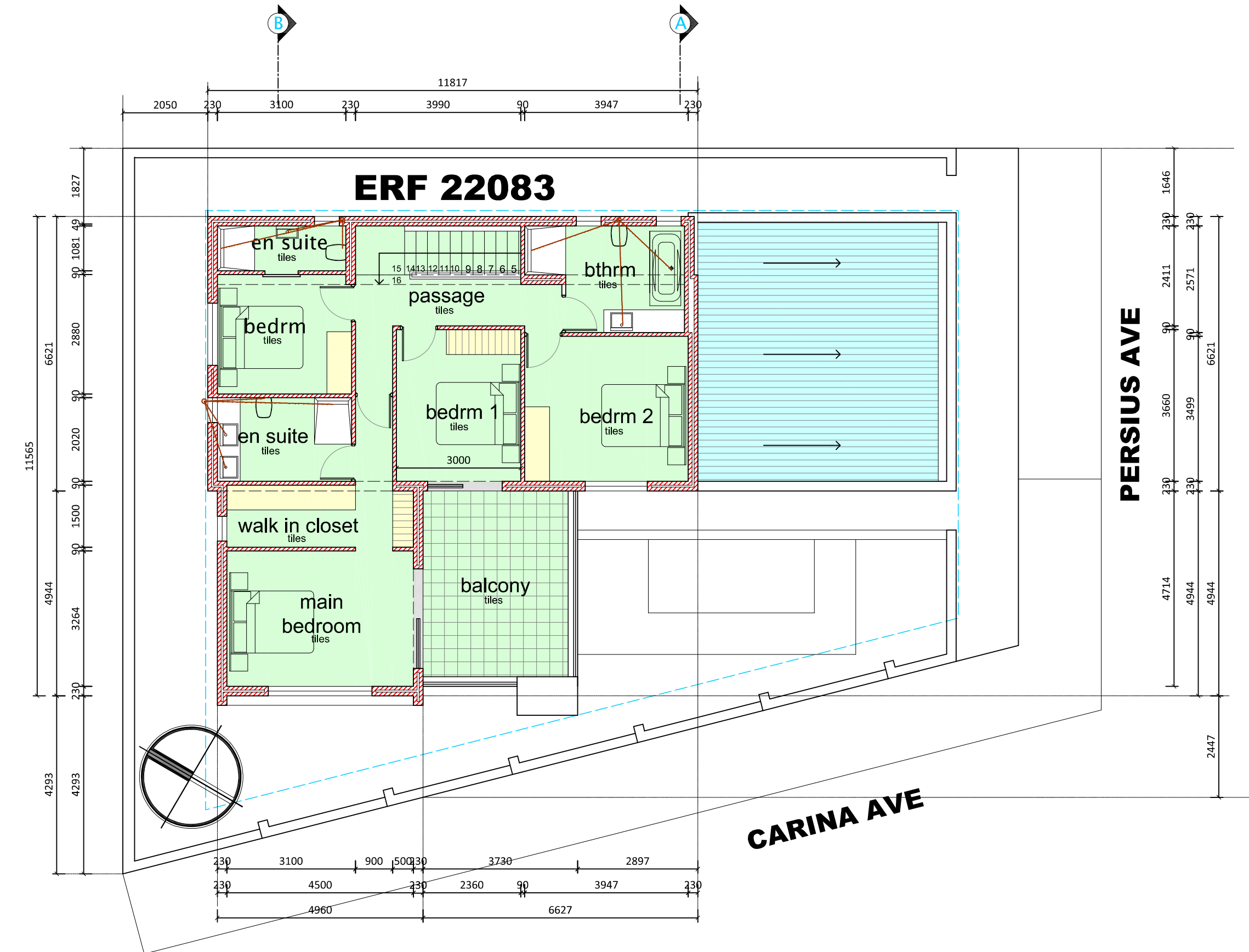
DRAWN:	D.BENJAMIN	CHECKED:	R DIRKSE
DATE:	JUNE 2025	SCALE:	1:100

PROJECT NO	DRAWING NUMBER	REV
1020	CD 100	01



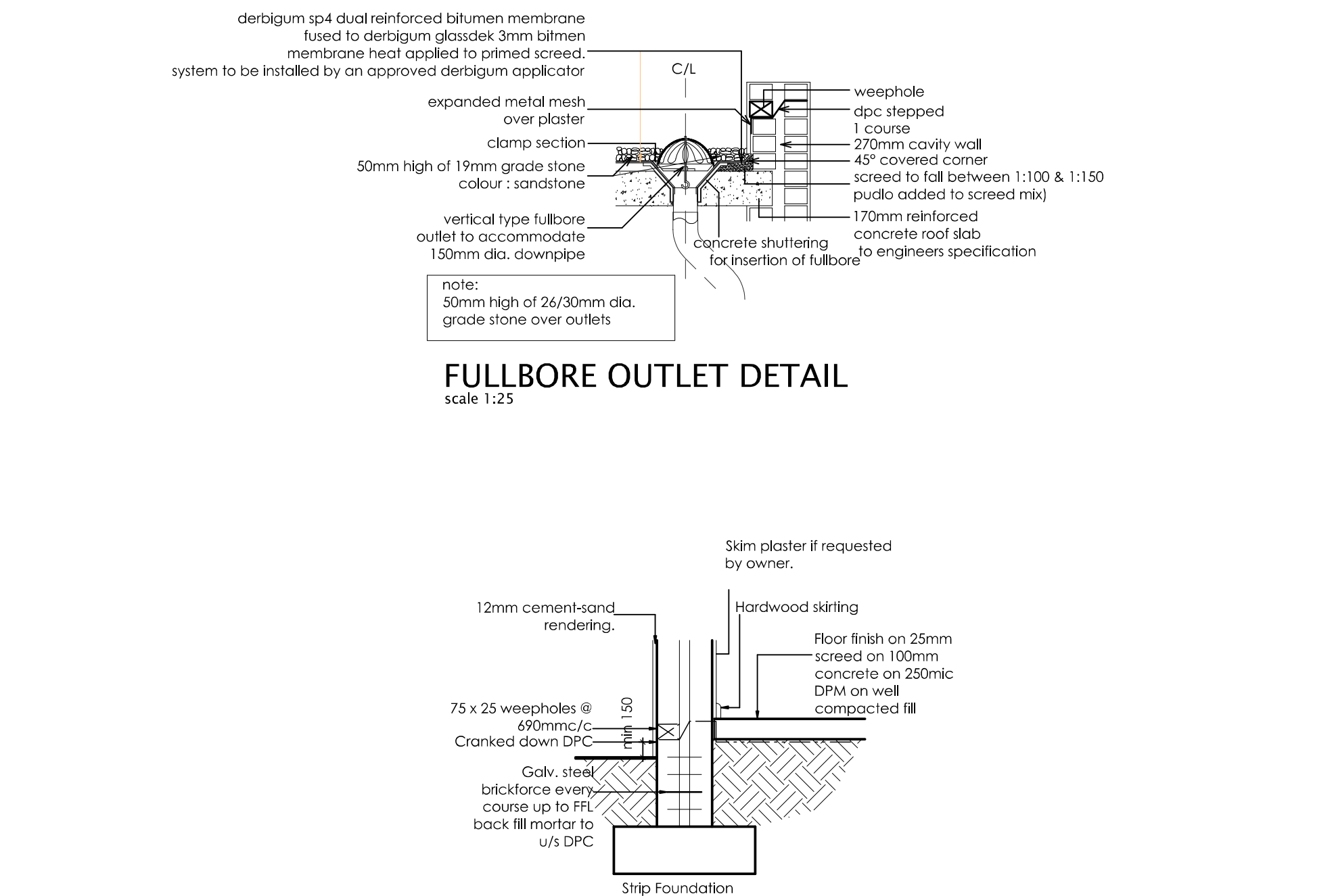
ROOF PLAN

scale 1:100



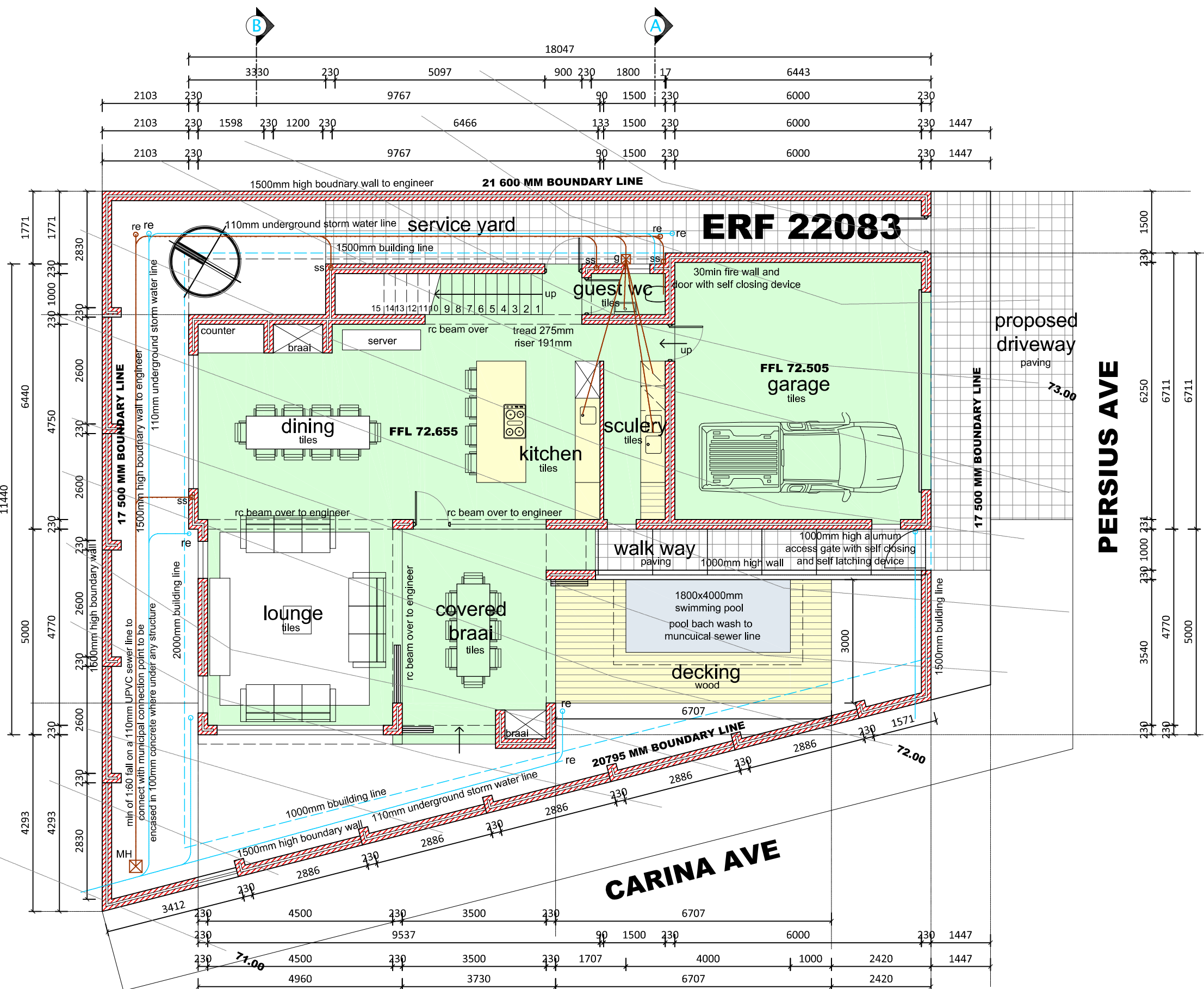
SITE/GROUND FLOOR PLAN

scale 1:100



FULLBORE OUTLET DETAIL

scale 1:25



DPC DETAIL

scale 1:25

SITE/GROUND FLOOR PLAN

scale 1:100

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15. ALL DRAIN PIPE WORKS AND MATERIAL MUST BE ACCORDING TO NBR REQUIREMENTS.
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17. ALL TIMBER ROOF TRUSSES MUST BE TREATED WITH TERMITE RESISTANT SUBSTANCE OR SIMILAR APPROVED.
18. WALL TIES SHALL BE INSTALLED IN ANY CAVITY WALL IN AN EVENLY DISTRIBUTED MANNER AT A RATE OF NOT LESS THAN 5 TIES PER SQ METER OF FACE AREA WHERE THE CAVITY IS MORE THAN 75MM IN WIDTH.
19. ALL EXTERNAL WALLS TO BE 230 MM CAVITY WALLS WITH 50MM SPACING.
20. PROVIDE WALL TIES 3/20MM AND BRICKWORK EVERY 3 COURSES.
21. PROVIDE WEATHERFLIES EVERY 6 BRICK COURSES.
22. ALL PARAPET WALLS TO BE WATERPROOFED WITH BANDAGE FLASHING AND AQUIC SEAL.
23. LOWER LIP OF DPC TO BE 150MM FROM FGL AND CAVITY BELOW FILLED WITH CONCRETE.
24. ALL INTERNAL AND EXTERNAL WALL OPENINGS LESS THAN 3M TO RECEIVE A PRE CAST CONCRETE LINTOL.
25. ALL INTERNAL WALLS TO RECEIVE A 600X200MM CONCRETE SLAB THICKENING.

kliplock roof sheets@ 35 degrees on isolation on 76x50mm purlins @ 900mm c/c on gangnail 114x38mm treated SAP wallplate all trusses tied down using galv steel hoop iron 1000mm into brickwork

stone aggregate on 50mm isoboard on fibre glass water proofing on 30mm cement screed to fall on 200mm in situ concrete roof slab with underside on roof to be skimmed and painted

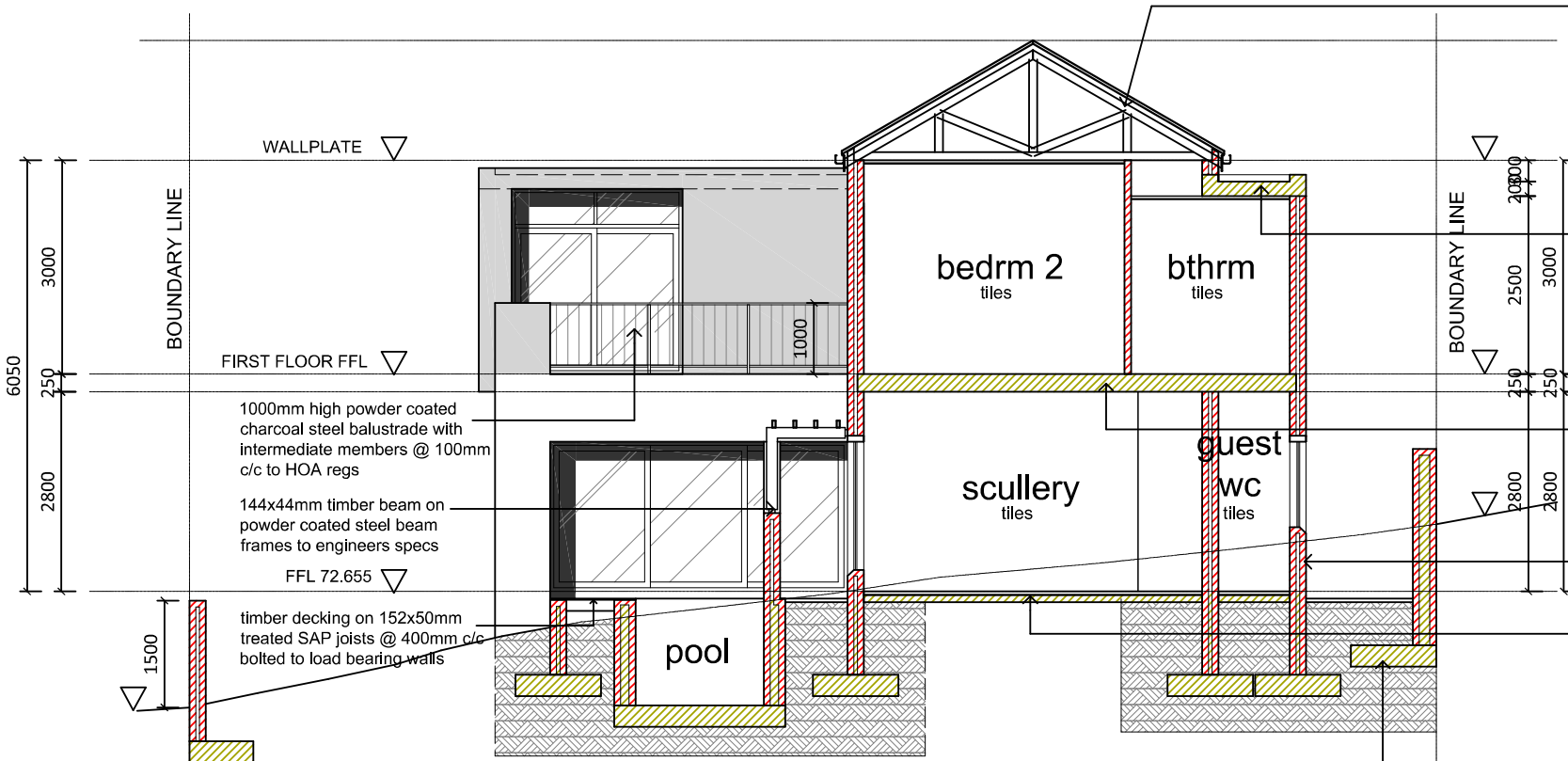
all aluminium to be charcoal glass to be as per AAMSA and SANS 10400 Part N regulations all to be in accordance with estate guidelines

tiles on screed on 200mm concrete to engineers design and spec

walls to be 230mm cement maxi walls to be plastered and painted as per HOA color scheme

tiles on 30mm cement screed on 100mm rc slab on 250 micron dpn on 50 sand blinding on 250mm well compacted fill all to engineers specs

New mass concrete strip foundation to engineer's detail. Foundation brickwork to receive brick force every coarse



SECTION A-A
scale 1:100

kliplock roof sheets@ 35 degrees on isolation on 76x50mm purlins @ 900mm c/c on gangnail 114x38mm treated SAP wallplate all trusses tied down using galv steel hoop iron 1000mm into brickwork

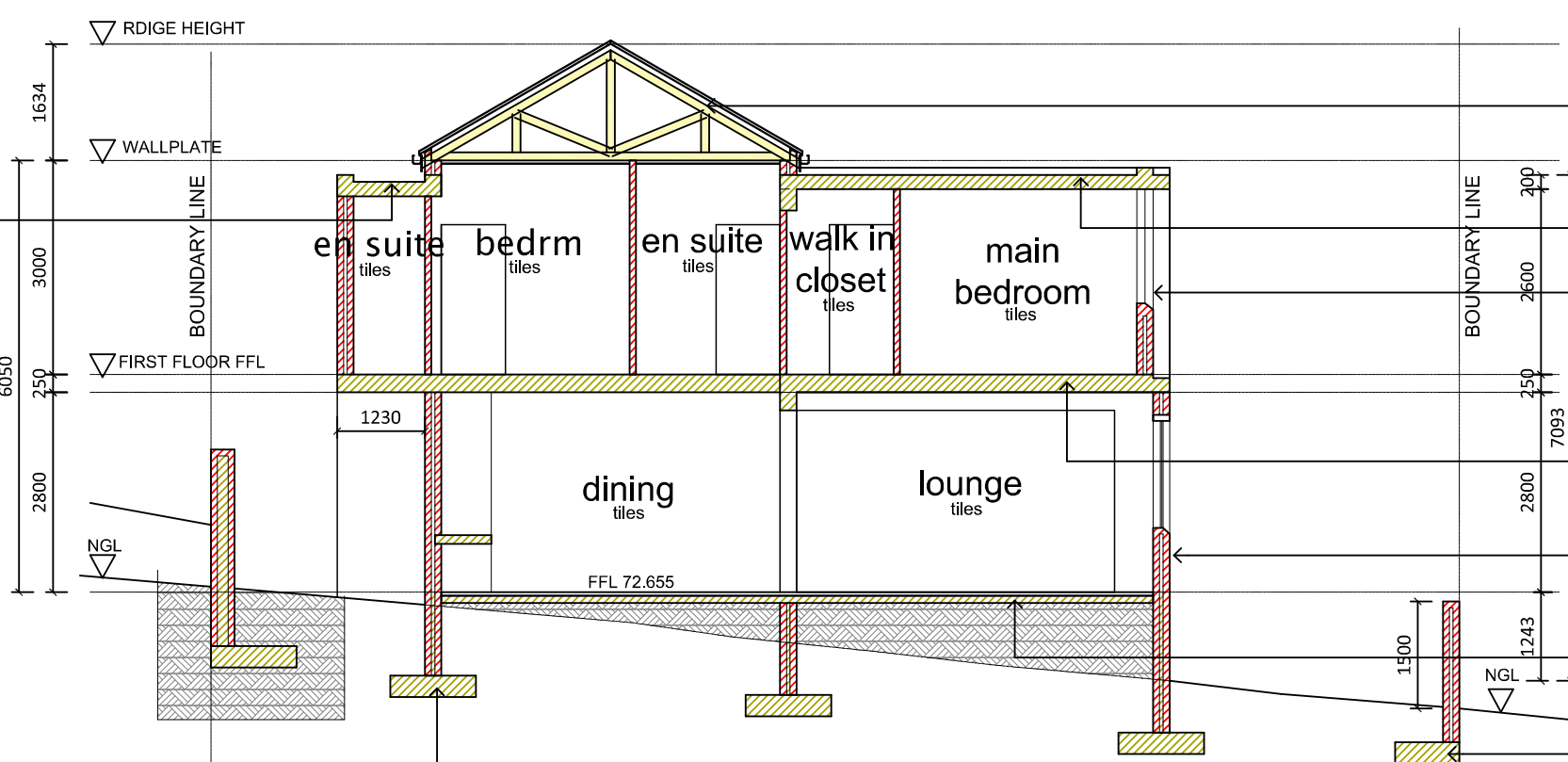
stone aggregate on 50mm isoboard on fibre glass water proofing on 30mm cement screed to fall on 200mm in situ concrete roof slab with underside on roof to be skimmed and painted all aluminium to be charcoal glass to be as per AAMSA and SANS 10400 Part N regulations all to be in accordance with estate guidelines

tiles on screed on 200mm concrete to engineers design and spec

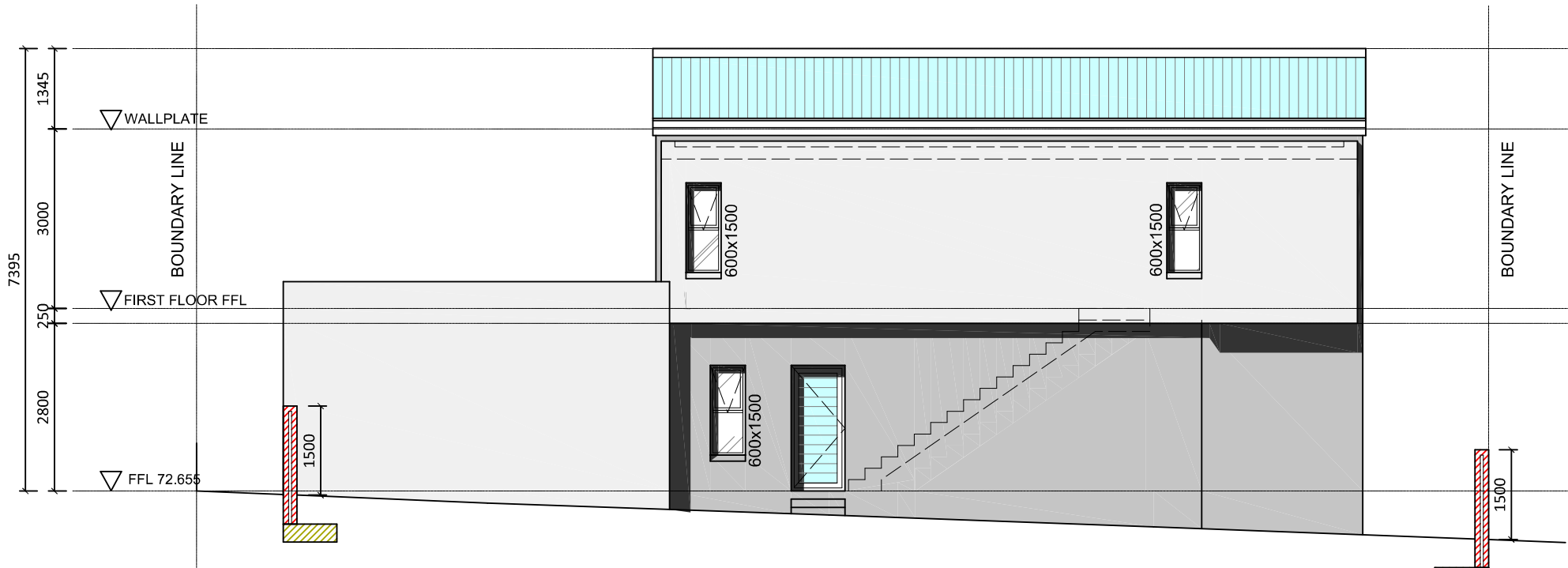
walls to be 230mm cement maxi walls to be plastered and painted as per HOA color scheme

tiles on 30mm cement screed on 100mm rc slab on 250 micron dpn on 50 sand blinding on 250mm well compacted fill all to engineers specs

New mass concrete strip foundation to engineer's detail. Foundation brickwork to receive brick force every coarse



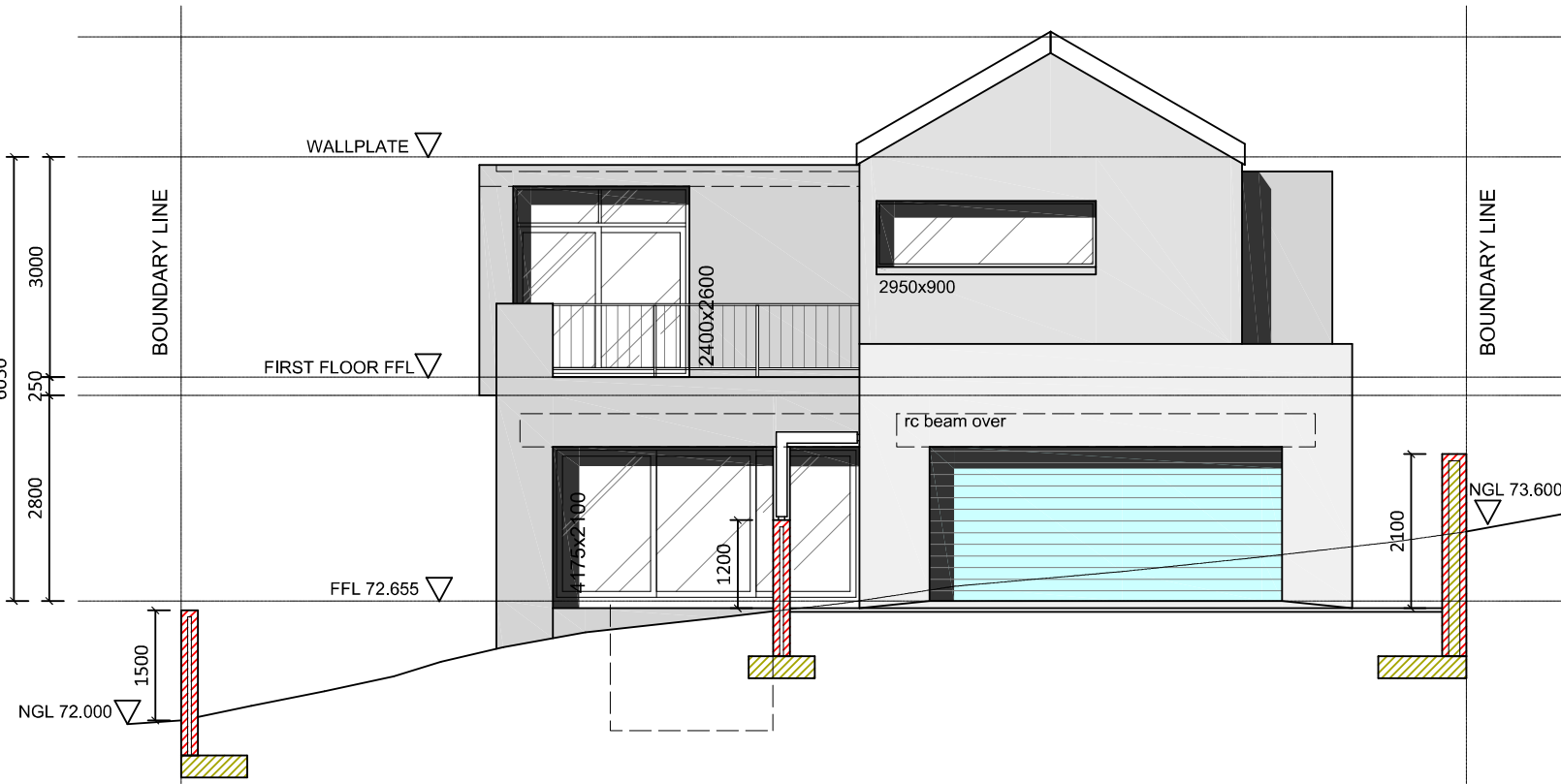
SECTION B-B
scale 1:100



EAST ELEVATION
scale 1:100



NORTH ELEVATION
scale 1:100



SOUTH ELEVATION
scale 1:100



WEST ELEVATION
scale 1:100

AREAS

SITE	- 323 SQM
DWELLING	
GROUND FLOOR	-155 SQM
FIRST FLOOR	-100 SQM
BALCONY	- 15 SQM

TOTAL FOOTPRINT	- 165 SQM
TOTAL SQM	- 270 SQM

COVERAGE	- 51.53%
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XA CALCULATIONS

ZONE 4
SANS 2022 XA Requires 20% NEW DWELLING
20 % of nett floor area :
(160m² + 100) x 20 = 35.20m²
WINDOW SQM =55.6
55.6/176X 100
=31.59%

Fenestration non-complies with SANS 2022 XA Form 2 required

New windows and sliding Doors
W1 4.27m X 2.7m = 11.1
W2 3.6m X 2.37m = 10.26
W3 0.6m X 1.2m = 0.72
W4 1.2m X 1.5m X 3 = 5.4
SD1 2.4m X 2.1m = 5.04
SD 2 3.9m X 2.4m = 9.36
W5 3.05m X 2.3m = 7.0
W6 1.2 m x 1.8m =2.15

ROOF INSULATIONS (R VALUES)

CEILING VOIDS	115 LITRES
ISOLATION	- 1.30
135MM ISOTHERM	- 3.15
TOTAL	- 4.45
CONCRETE ROOFS	
40MM ISOBOARD	- 1.9

HOT WATER DEMAND

MINIMUM OF 50% BY VOLUME OF ANNUAL AVERAGE HOT WATER HEATING REQUIREMENTS SUPPLIED BY ALTERNATIVE MEANS.

1. HOT WATER CALCULATION FOR THE GROUND FLOOR BEDROOM WING.
A H4 DWELLING OCCUPATION 2 PEOPLE PER BEDROOM X 3 BEDROOMS = 6 PEOPLE
B USAGE PER PERSON PER DAY = 115 LITRES
C HOUSEHOLD CONSUMPTION PER DAY AT 55 DEGREES C = 115 LITRES PER PERSON X 6 = 690 LITRES
D STORAGE VOLUME AT 50 DEGREES CELSIUS + 50 LITRES/ PERSON X 6 = 300 LITRES
E AMBIENT INWOT TEMPERATURE = 14 DEG. C
F TARGET OUTPUT TEMPERATURE (DELIVERY TEMPERATURE) = 55 DEG. C
G AVERAGE DIFFERENCE IN TEMPERATURE = 41 DEG. C
H SPECIFIC HEATING OF LITRES OF WATER = 4.182 KJ/KG
I DAILY ENERGY REQUIRED TO HEAT WATER = 2.47 KJ
J KWH PER DAY = 115 DIVIDED BY 3600 = 32.50 KWH
K ENERGY REQUIREMENT TO HEAT WATER PA = 35.00 KWH X 365 DAYS = 12 775.00 KWH
L 50 % OF ENERGY REQUIRED TO HEAT WATER PER YEAR = 63 872.00 KWH

A STORAGE CAPACITY	= 300 LITRES
B FLOW RATE	= 12 - 14.5 L/MIN
C HEATING CAPACITY	= 4.2 KW
D POWER CONSUMPTION	= 1.3 KW

KWIK KOT GEYSER SAVES 70% OF ENERGY USAGE

HEAT PUMP ENERGY USAGE = LESS THAN 50% OF ENERGY REQUIRED = 3832.50 KWH

INSTALLATION COMPLIES.
HEATPUMP SPECIFICATION: 4.2 KW WITH 200 LITRE STORAGE CAPACITY.

PROJECT DETAILS

CLIENT: DE VOS
DISCRPTION: NEW DWELLING
LOCATION MZURI ESTATE MZURI AVE SOMERSET WEST

DRAWING DETAILS

TITLE FLOOR PLANS AND ROOF PLANS
PROJECT REF PROJECTS I 815

DRAWN:	D.BENJAMIN	CHECKED:	R DIRKSE
DATE:	JUNE 2025	SCALE:	1:100

PROJECT NO	DRAWING NUMBER	REV
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