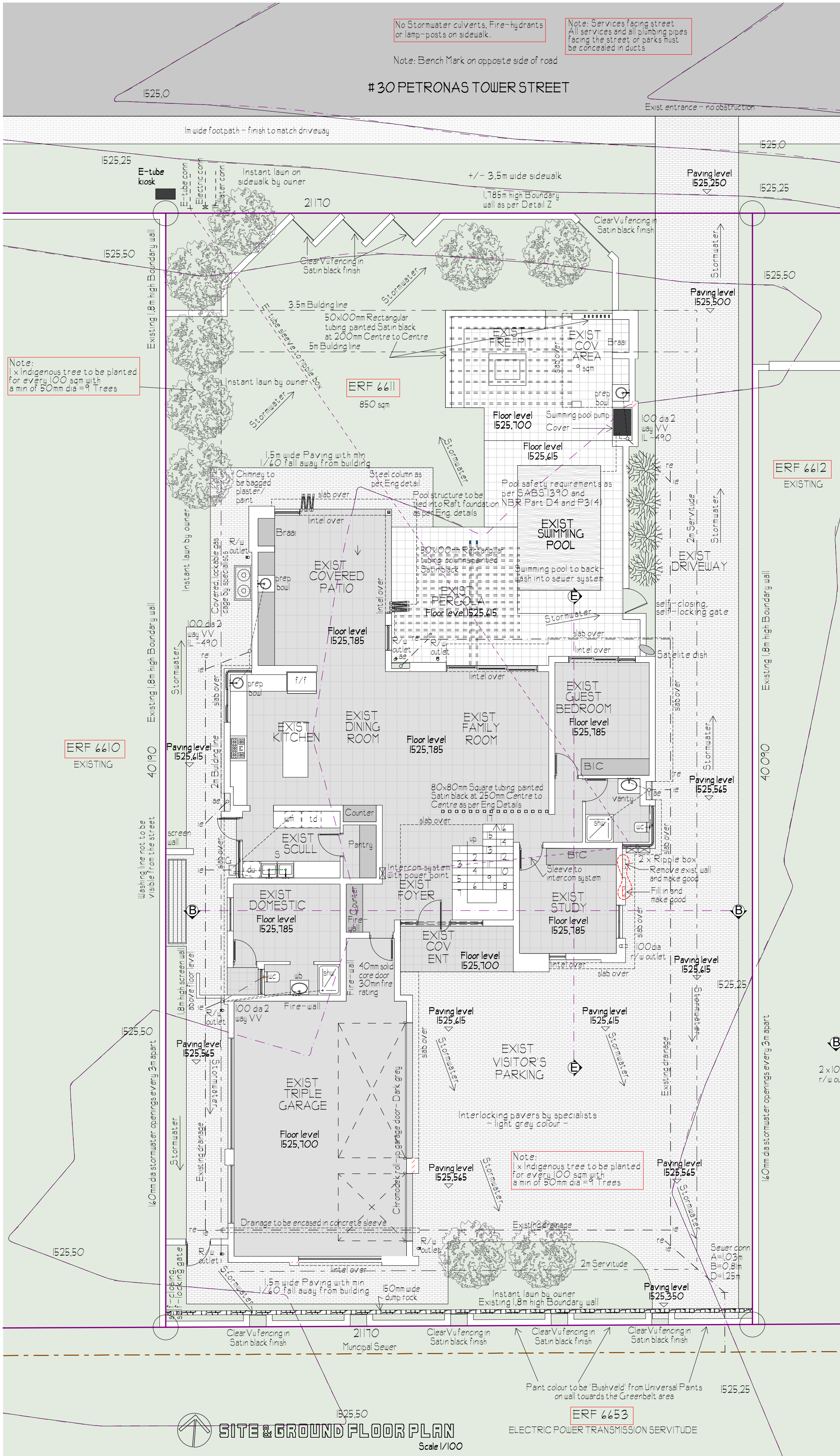
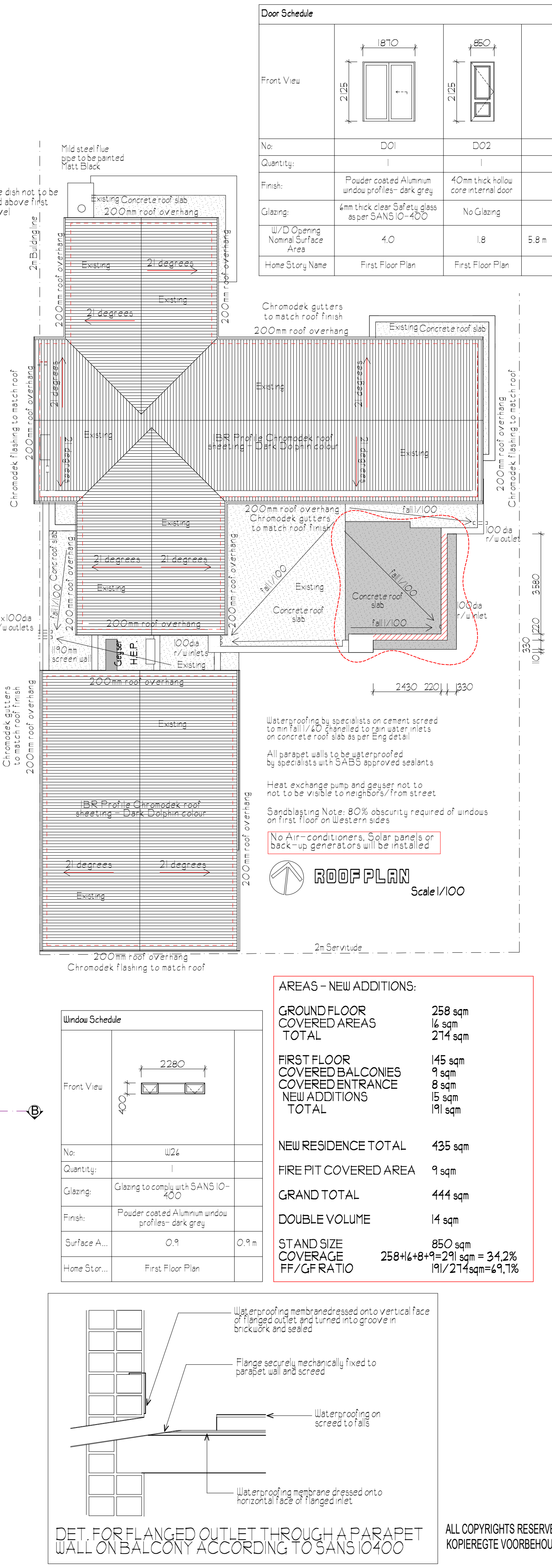
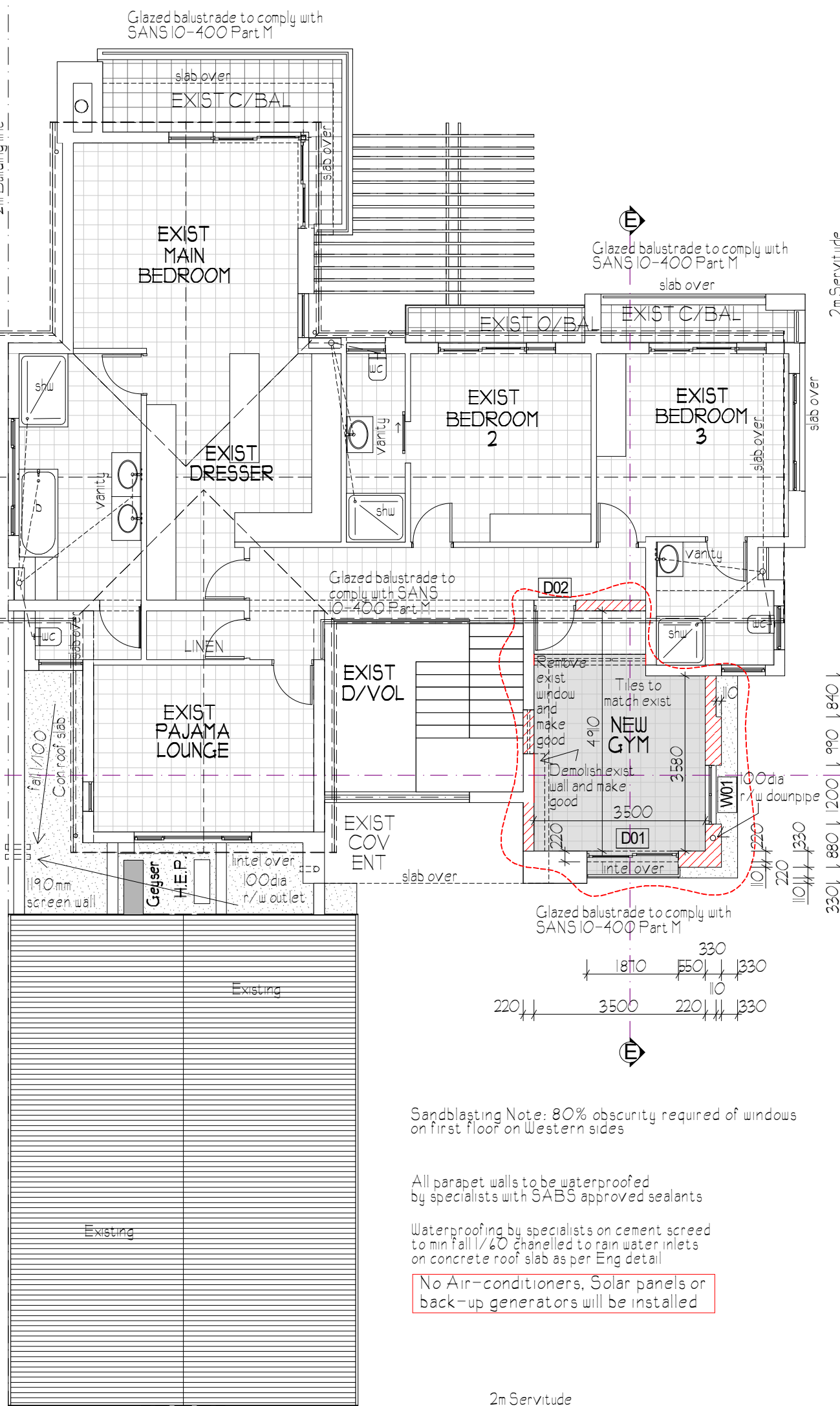




R-value and CR-value calculator

Inputs	Select the material	Thickness
Wall elements	First click the yellow box and then a dropdown icon will appear.	(Millimeters)
Outside surface coefficient		
Outer plaster or rendering	Sand cement mixture - painted	10
Outer thermal insulation	None	0
Outer air space	None	0
Outer masonry or structural element	Heavyweight brickwork & face brick	115
Mid wall outer air space	None	0
Mid-wall thermal insulation	Extruded polystyrene	20
Mid wall inner air space	None	0
Mid-wall masonry or structural element	Cement mortar	0
Inner wall air-space	None	0
Inner wall thermal insulation	None	0
Inner masonry or structural element	Heavyweight brickwork & face brick	115
Inner air-space	None	0
Inner liner insulation	None	0
Inner liner or partitioning	None	0
Inner plaster or rendering	Sand cement mixture - painted	10
Inner surface coefficient		270
Results		
R-value for the wall	→	1.03 m ² /K
C-value for the wall	→	441 kJ/m ² /K
CR-value for the wall	→	126 Hours



GENERAL NOTES:

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS ACT 1977 AND LOCAL AUTHORITIES BY-LAWS.

QUALITY OF ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH RELEVANT SANS SPECIFICATIONS.

ALL STRUCTURAL WORK TO BE DESIGNED BY PROFESSIONAL ENGINEER. ALL ELECTRICAL AND PLUMBING WORK TO BE CARRIED OUT BY REGISTERED ARTISANS.

CONTRACTOR TO VERIFY ALL LEVELS, HEIGHTS AND DIMENSIONS ON SITE AND TO CHECK SAME AGAINST THE DRAWINGS BEFORE PUTTING ANY WORK IN HAND.

CONTRACTOR IS RESPONSIBLE FOR SETTING OUT OF BUILDINGS.

THIS DRAWING IS UNDER NO CIRCUMSTANCES TO BE SCALED. ONLY FIGURED DIMENSIONS TO BE USED. IF DIMENSIONS ARE MISSING, ASK THE ARCHITECTURAL TECHNOLOGIST.

A MINIMUM OF 50% BY VOLUME OF ANNUAL AVERAGE HOT WATER HEATING REQUIREMENT SHALL BE PROVIDED BY MEANS OTHER THAN ELECTRICAL RESISTANCE HEATING. SOLAR WATER HEATING SYSTEMS AS PER SANS 1037 AND SANS 1038. THE INSTALLATION OF SOLAR WATER HEATING SYSTEMS AS PER SANS 10254.

THIS DRAWING REMAINS THE PROPERTY OF THE ARCHITECTURAL TECHNOLOGIST UNTIL THE PROJECT HAS BEEN COMPLETED AND SIGNED OFF. THEREAFTER THIS DRAWING BECOMES THE PROPERTY OF THE CLIENT.

ALL OPENINGS EXCEEDING 2.4m SPAN TO BE SPANNED BY PRECAST CONCRETE LINTELS OR SOLID CONCRETE BEAM TO PR. ENG. SPECS.

THE ARCHITECTURAL TECHNOLOGIST CANNOT BE HELD RESPONSIBLE FOR ANY DELAY WITH PLAN APPROVAL DUE TO ADMINISTRATIVE PROBLEMS BEYOND HIS CONTROL.

FOUNDATIONS

ALL FOUNDATIONS TO BE CASTED IN VIRGIN GROUND. 15mpa CONCRETE TO BE USED. TOP OF FOUNDATIONS TO BE AT LEAST 300mm BELOW NGL UNDER ALL CIRCUMSTANCES.

FLOORS

25mm SCALED ON 75mm CONCRETE SURFACE - BED ON WELL RAMMED HARD CORE FILLING ON SOIL WHICH HAD BEEN CHEMICALLY TREATED AGAINST PLANT GROWTH AND INSECTS. FINISHED FLOOR LEVELS TO EXCEED AT LEAST 150mm ABOVE NGL, UNLESS OTHERWISE INDICATED BY DRAWING.

WALLS

BRICK WALLS TO BE BUILT IN HORIZONTAL STRETCHER BOND UNLESS SPECIFIED OTHERWISE. BRICKWORK TO BE USED AT EVERY FIFTH COURSE AND OVER WINDOW AND DOOR OPENINGS. D.P.C. UNDER ALL WALLS AT SLAB LEVEL AND UNDER ALL WINDOW SILLS.

WINDOWS

WINDOWS TO HABITABLE ROOMS TO PROVIDE MINIMUM OF 10% LIGHT TO FLOOR AREA OF ROOM WITH 50% OPENINGS. BRICKWORK AT BOTH ENDS OF WINDOW OPENING. MAX. PERMISSIBLE AIR LEAKAGE FOR OPENABLE GLAZING AS PER SANS 613.

GLAZING

ALL GLAZING TO BE IN ACCORDANCE WITH SANS 10400 PART N. SAFETY GLASS TO BE USED AT ALL GLASS DOORS AND BE ISSUED WITH RECOGNITION MARKERS WHERE GLAZING OCCURS WITHIN 300mm OF FFL. ALL FIRST FLOOR WINDOWS AND STAIRWELLS TO BE FITTED WITH 6mm SAFETY GLASS. GLAZING CERTIFICATE TO BE ISSUED BY INSTALLER / MANUFACTURER. GLASS THICKNESS: MAX. SIZE OF PANE: 3mm - 0.75sqm 4mm - 1.5sqm 5mm - 2.1sqm 6mm - 3.2sqm

CEILINGS

RHINOBOARD CEILING FIXED TO 38x38mm S.A. PINE BRANDING AT MAX. 450mm C/C WITH 38mm CLOUT NAILS AT 150mm C/C FIXED TO THE BEAM WITH 75mm WIRE NAILS 10mm THICK GYPSUM CEILING BOARD.

ROOF INSULATION:

MINIMUM THICKNESS OF CELLULOSE FIBRE LOOSE FILL OR FLEXIBLE FIBRE GLASS BLANKET TO BE 135mm THICK OR TO HAVE A MINIMUM R-VALUE OF 3.35 SQM X /W TO COMPLY WITH FIRE SAFETY REQUIREMENTS GIVEN IN SANS 10400-T AND SANS 428.

ROOF NOTES

CONCRETE ROOF TILES ON 38x38mm S.A. PINE BRANDING AT MAX. 345mm C/C. ROOF TRUSSES AT MAX 760mm C/C. SABS APPROVED UNDERLAY TO ALL ROOFS REGARDLESS OF ROOF PITCH. 10mm BOLTS WITH WASHERS, 76x38mm WALL PLATE, S.A. PINE GRADE 6. PR. NG OR SUPPLIER OF TRUSSES TO ISSUE CERTIFICATE. 100mm PAVING ROUND BUILDING IF CUTTERS & RMP'S ARE NOT INSTALLED. 1500mm PAVING ROUND BUILDING IF CUTTERS & RMP'S ARE NOT INSTALLED WHERE REQUIRED BY NHRC WHERE SOIL CONDITIONS ARE PROBLEMATIC.

DRAINAGE

1:5 AT ALL BENDS, JUNCTIONS AND CHANGE OF GRADIENT OF DRAIN. C.E.'s TO HAVE MARKED COVERS AT GROUND LEVEL. ALL GULLIES IN OPEN AIR, 110mm AND 50mm SOILPIPES TO BE LAID TO MIN. FALL OF 1:40 UNLESS OTHERWISE SHOWN BY DRAWING. ALL DRAINAGE PIPES CLOSER THAN 900mm FROM BUILDING UNDERNEATH THE BUILDING TO BE INCASED IN 100mm CONCRETE CASING. ALL WASTE FITTINGS FITTED WITH RESEAL TRAPS. NO BENDS OR JUNCTIONS PERMITTED UNDER BUILDINGS. ALL WASTEWATER PIPES TO BE MIN. 50mm DIAMETER. ALL HWB, SINKS AND WASHTRUGHS TO BE FITTED WITH S OR P TRAP. PROVIDE HIGHEST POINT OF SEWERAGE WITH 110mm DIA. O.V.V. PROVIDE LOWEST POINT OF SEWERAGE WITH GULLY. ALL FITTINGS TO BE ACCESSIBLE.

REV	WYS	DATE	DAT	DESCRIPTION	BESKRYWING
PROJECT					PROJECT

Proposed new Dwelling on Erf 661, Midstream Estate X83 for ANIMO

OWNERS SIGNATURE: EIEENARS HANDTEKENING

ENGINEERS SIGNATURE: INGENEURS HANDTEKENING

S & B CONCEPTS
ARCHITECTURAL CONSULTANTS
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TEL: 083 412 6915
7 MIT SHEPHERD STREET, MIDLANDS ESTATE
email: sbarchitect@gmail.com

DWG TITLE: Submission Plans
Site, Ground, First Floor, Roof plan, Areas, Door Window Sch

DATE	DATUM	DRAWN	GETEK
April 2024		SSB	

DESIGN	ONTWERP	ISSUED	UITGEREK
SSB			

PROJECT NO	PROJEC NO	DWG/TEK NO	REV/WYS NO
25-Erf 661-01			REV A