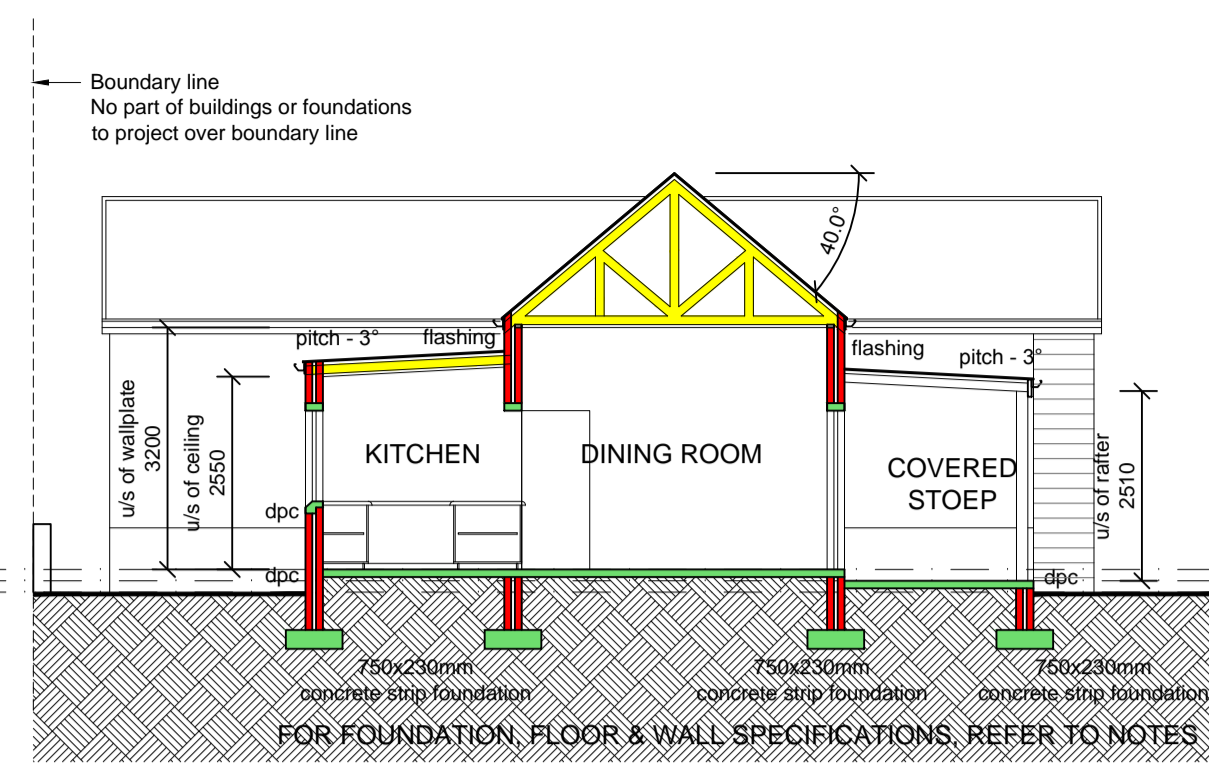
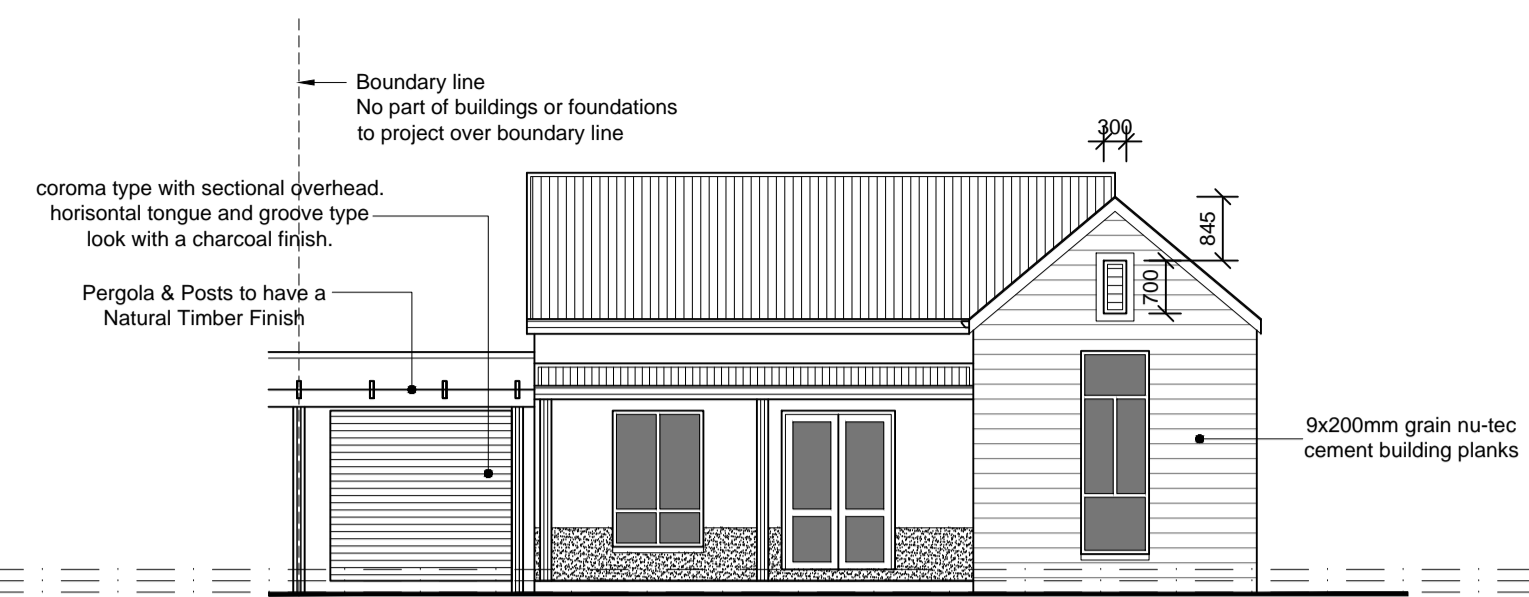


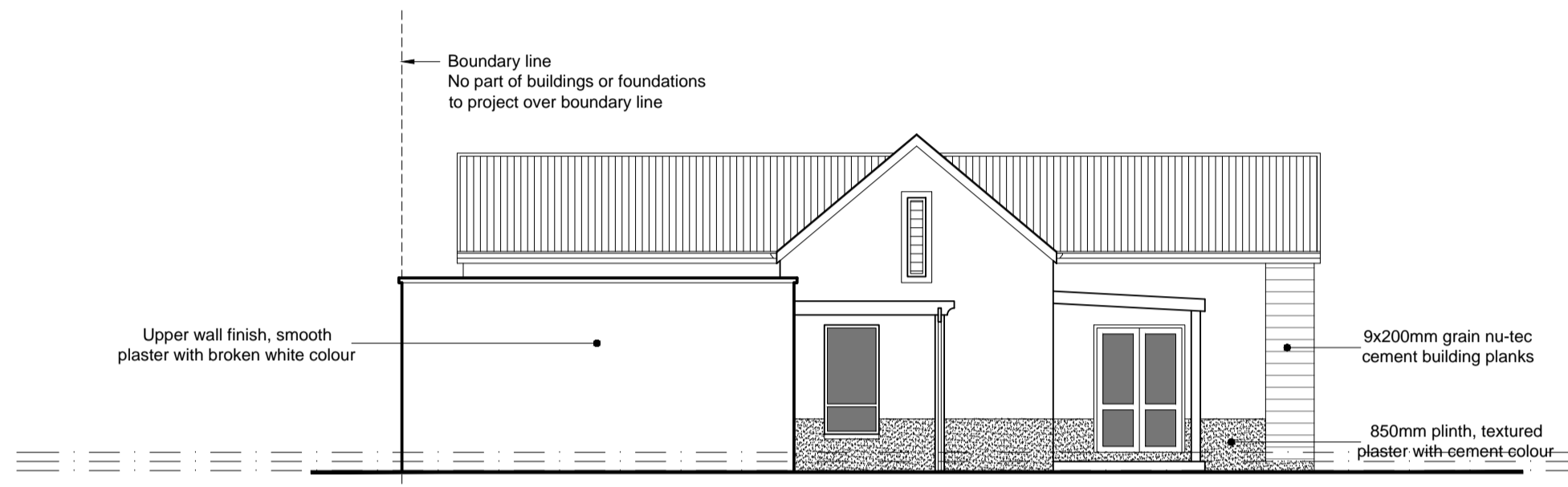
SOUTH ELEVATION 1:100



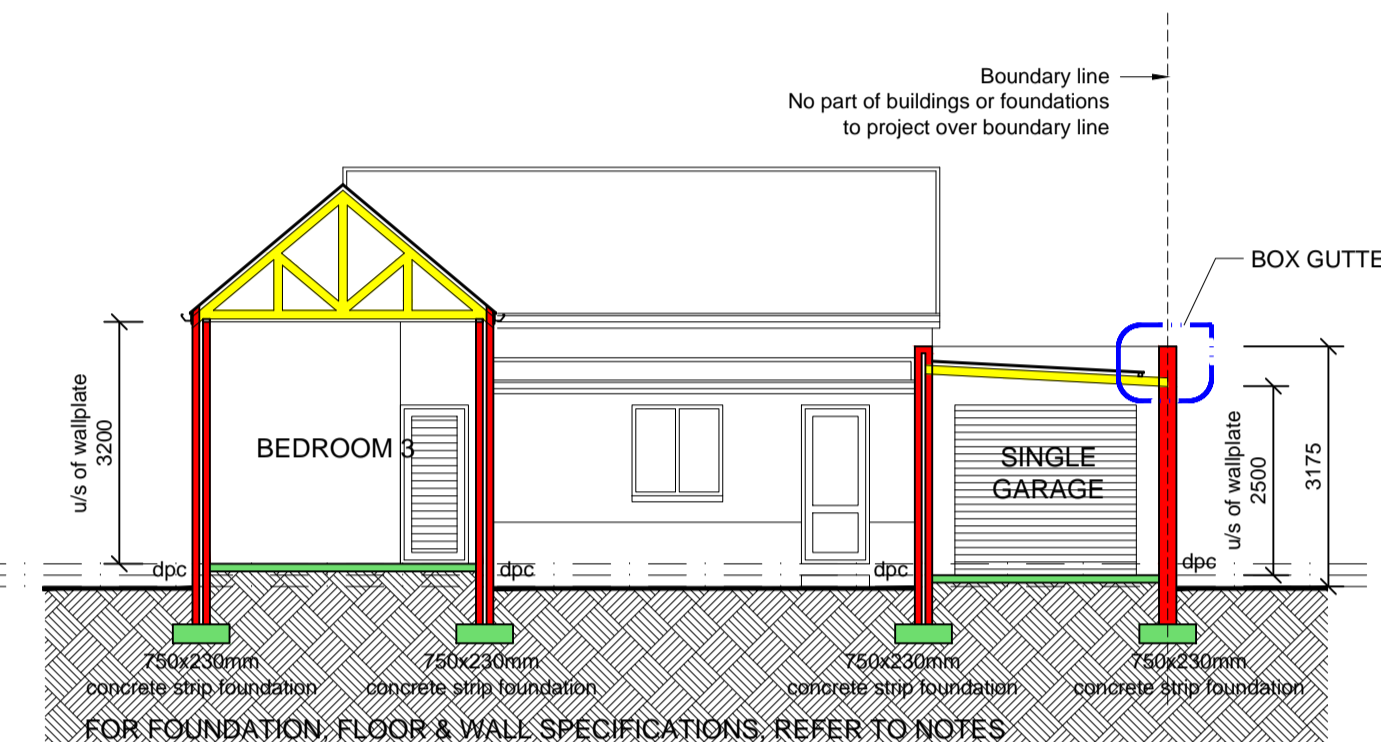
SECTION A-A 1:100



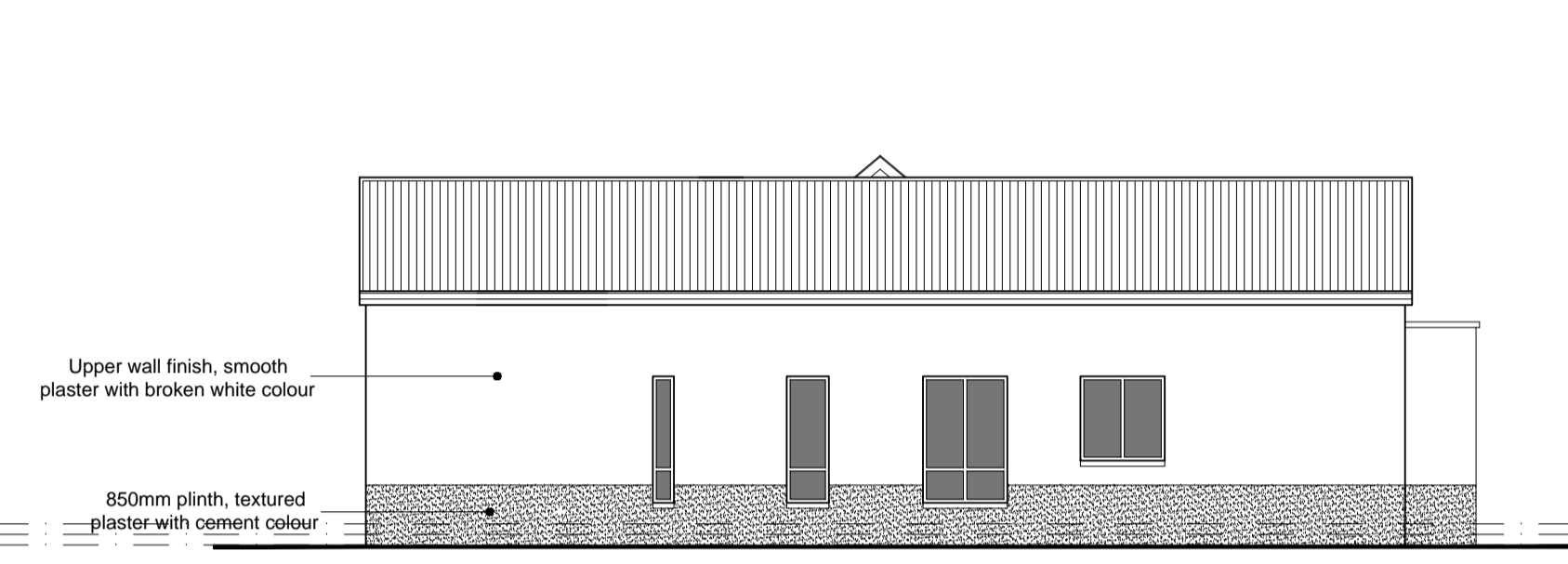
NORTH ELEVATION 1:100



WEST ELEVATION 1:100



SECTION B-B 1:100



EAST ELEVATION 1:100

SPECIFICATION & NOTES:

- FOUNDATIONS:**
- 750x230mm CONCRETE STRIP FOR 230mm BRICK WALLS.
 - 600x300mm CONCRETE FLOOR SLAB THICKENING FOR 90mm INTERNAL WALLS.
 - 700x230mm CONCRETE STRIP FOR 230mm VARIOUS BOUNDARY WALLS.
 - 1000x1000x300mm FOUNDATIONS FOR 345 AND 465mm PIERS.
 - FOUNDATION WALLS DEEPER THAN 1000mm TO BE 395mm - (230mm BRICK, 50mm CAVITY, 115mm BRICK), CAVITY TO BE CONCRETE FILLED TO DPC LEVEL.
 - STRUCTURAL FOUNDATIONS TO ENGINEER'S DETAILS.
- FLOORS:**
- TILES OR CARPETS ON MN 30mm THICK SCREED ON 100mm 15MPa CONCRETE SURFACE BED ON 350mm MICRON DAMP PROOF MEMBRANE ON LAYERS OF 150mm WELL COMPACTED FILL TO 80% MOD. A.S.H.T.O.
 - DAMP PROOF MEMBRANE TO BE WELL LAPPED TO BRICKWALL DPC.
 - FIRST FLOOR - FINISH AS PER SPECIFICATIONS ON 250mm R.C. SLAB TO ENGINEER'S DETAIL.
- WALLS:**
- MAXI SIZE BRICK.
 - EXTERNAL WALLS TO BE DOUBLE SKIN WITH 50mm CAVITY TO AN OVERALL DIMENSION OF 230mm.
 - No. 3 GALVANIZED BRICK TIES TO 230mm CAVITY WALLS.
 - INTERNAL WALLS TO BE 230mm DOUBLE SKIN AND 115mm SINGLE SKIN.
 - GALVANIZED LADDER-TYPE BRICKFORCE EVERY 5th COURSE WITH No. 2 COURSES ADDITIONALLY BELOW WINDOW CILLS AND ABOVE ALL OPENINGS.
 - PRECAST LINTOLS OVER ALL OPENINGS AND LAID IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - STEPPED BRICKWORK DPC TO BE A MINIMUM OF 150mm ABOVE GROUND LEVEL WITH WEEP HOLES EVERY SECOND PERPEND.
- ROOF, RAINWATER GOODS AND CEILINGS:**
- ALL ROOF TIMBERS TO SPECIALIST ENGINEER'S SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS.
 - MAIN ROOF PITCH - 40°
 - GARAGE & LEAN-TO ROOF PITCH - 3°
 - CLEAN COLORBOND ULTRA "ORE GREY" COMPLETE WITH SABS APPROVED PLASTIC UNDERLAY WITH 150mm MINIMUM OVERLAPS AND CARRIED WELL INTO GUTTERS.
 - 50x75mm TIMBER PURLINS @ 320mm CENTRES.
 - MAIN ROOF - 38x14mm TIMBER TRUSSES @ 760mm CENTRES.
 - GARAGE & LEAN-TO ROOF - 38x152mm TIMBER RAFTERS @ 760mm CENTRES.
 - 38x14mm TIMBER WALL PLATES.
 - 1.5x38mm GALVANIZED HOOP IRON TIES BUILT INTO WALL, 600mm DEEP.
 - 200x150mm GALVANIZED PURPOSE MADE BOX GUTTERS COMPLETE WITH HOPPER BOX AND RIVOP.
 - 75 x 100mm ALUMINIUM CONTINUOUS GUTTERS COMPLETE WITH 750 DOWNPIPES.
 - FLASHING TO ALL PARAPET WALLS.
 - CONCRETE ROOF - ENGINEER'S DESIGN - RE-REINFORCED CONCRETE WITH APPROVED WATERPROOFING AGENT.
 - CEILINGS - SKIMMED GYPSUM BOARD ON 38x38mm BATTENS @ 450mm CENTRES.
 - 50mm THICK FIBREGLASS INSULATION.
- GENERAL NOTES:**
- ALL WORK TO BE IN ACCORDANCE WITH THE SANS 10400.
 - DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE.
 - OVERALL DIMENSIONS TO TAKE PRECEDENCE (EXT).
 - WORK TO FIGURED DIMENSIONS ONLY.
 - DPC TO ALL VERTICAL AND HORIZONTAL OPENINGS.
 - FOUNDATIONS TO BE A MINIMUM OF 300mm BELOW VIRGIN SOIL.
 - GABLE ENDS TO BE TIED BACK TO TRUSSES WITH HOOP IRON STRAP @ 600mm CENTRES.
 - GARAGE FFL 150mm ABOVE B.O.F. AT DRIVEWAY ENTRANCE.
 - HOUSE FFL 300mm ABOVE B.O.F. AT BOUNDARY I.C.
 - ALL GLAZING TO COMPLY WITH REQUIREMENTS OF SANS 10137 & SANS 10400 PART N. ACCESS DOORS & SIDE LIGHTS TO HAVE SAFETY GLASS. WINDOWS LOWER THAN 500mm FROM FLOOR, WINDOWS LOWER THAN 1800mm ABOVE PITCH LINE OF STAIRS AND SHOP FRONTS TO BE SAFETY GLASS.
 - ALL GLAZING TO COMPLY WITH SABS 0137.
 - DRAINS 100mm PVC - MINIMUM FALL OF 1:80.
 - RES OR RES AT ALL BENDS AND JUNCTIONS WITH MARKED COVERS AT GROUND LEVEL.
 - CLOSED SYSTEM ENTER AT 45° JUNCTIONS.
 - 600mm BENDS TO DRAINAGE RUN.
 - MINIMUM DEPTH OF 400mm BELOW COVER LEVEL.
 - COVER LEVEL 76mm ABOVE BOUNDARY I.C.
 - PARAPET WALL NOT TO EXCEED 500mm IN HEIGHT.
 - WALLS BETWEEN HOUSE AND GARAGE TO BE BEAMFILLED.
 - ALL MANHOLES AND RES UNDER DRIVEWAYS OR CONCRETE SLABS TO BE SEALED WITH HEAVY DUTY COVERS.
 - CONTRACTOR TO ENSURE THAT A BALANCED WATER PRESSURE SYSTEM IS INSTALLED WITH ALL VALVES ETC. HOUSED IN ROOF SPACE.

AREA CALCULATIONS:

HOUSE FLOOR	93.96m ²
GARAGE FLOOR	20.95m ²
COVERED STOEP	14.51m ²
TOTAL (incl. covered stoep)	129.42m²
SITE AREA	240.89m ²
COVERAGE	129.42m ² - 53.72%

* THE DESIGN ON THIS DRAWING IS THE PROPERTY OF SKALK STEYN ARCHITECTURE AND IS COPYRIGHT PROTECTED.

SIGNATURE

PROPOSED NEW HOUSE FOR AMPHORIA (PTY) LTD

PORTION 5 & 31 - DASSENVALLEY FARM NO. 45
ERF 276 - MEUL ROAD
PHILADELPHIA
MUNICIPAL APPLICATION

DESIGNED Skalk Steyn

DRAWN Fred James Muller

SCALE As Shown

CHECKED Skalk Steyn

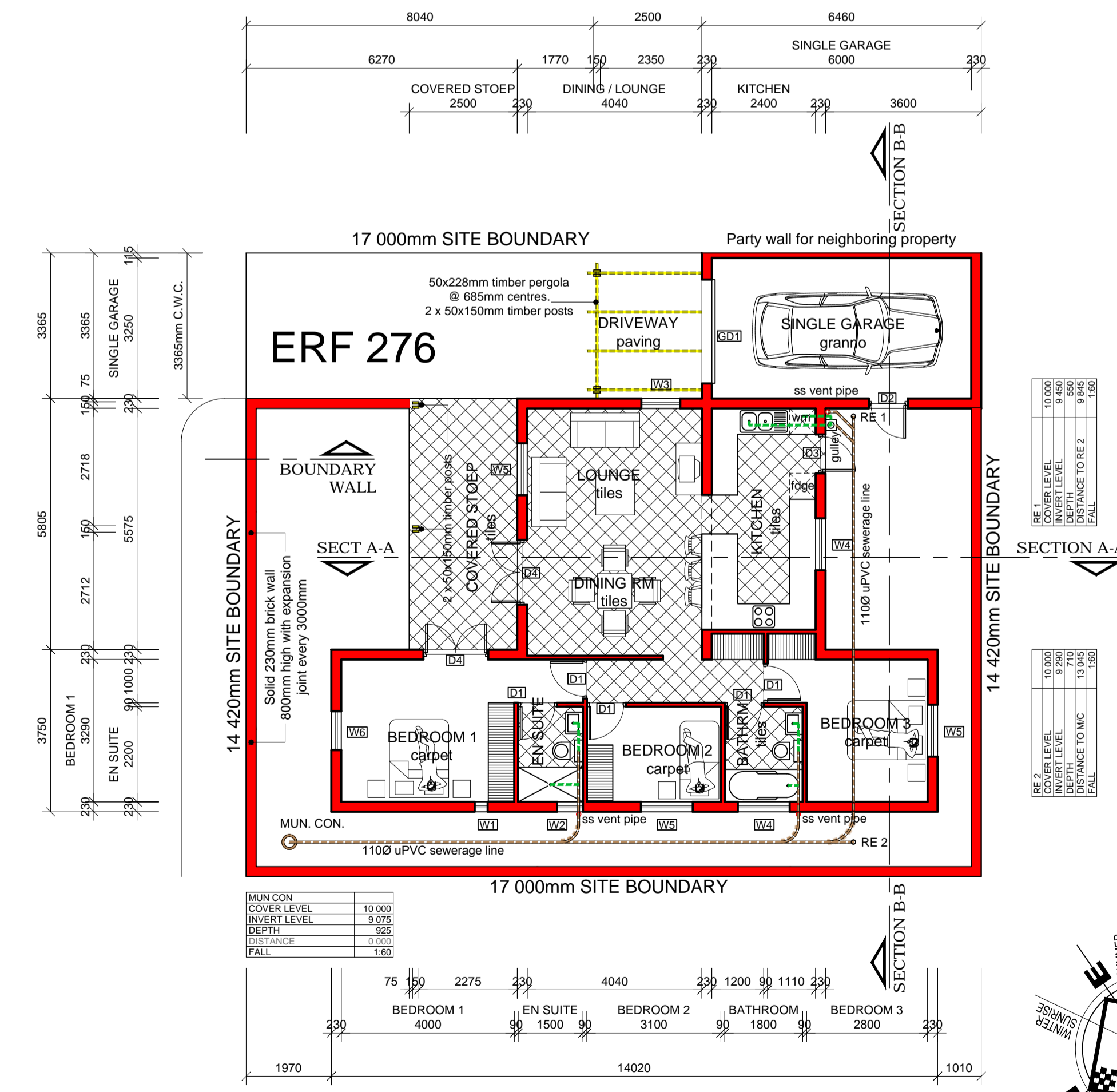
DATE 03 SEPTEMBER '13

REVISIONS

SKALK STEYN ARCHITECTURE

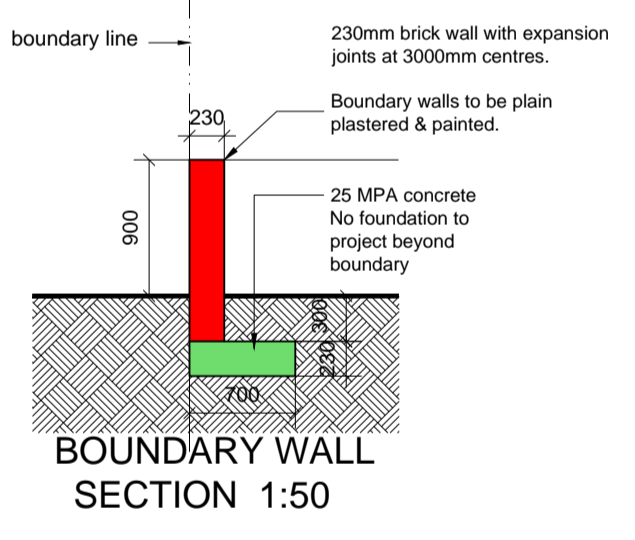
22 WARATAH AVE
PO BOX 61, 7437
MELKBOSSTRAND
TEL. 021 553 4386
CELL. 083 325 2765
skalk@afrika.com

DRAWING NUMBER: 1779 / 04 / 08

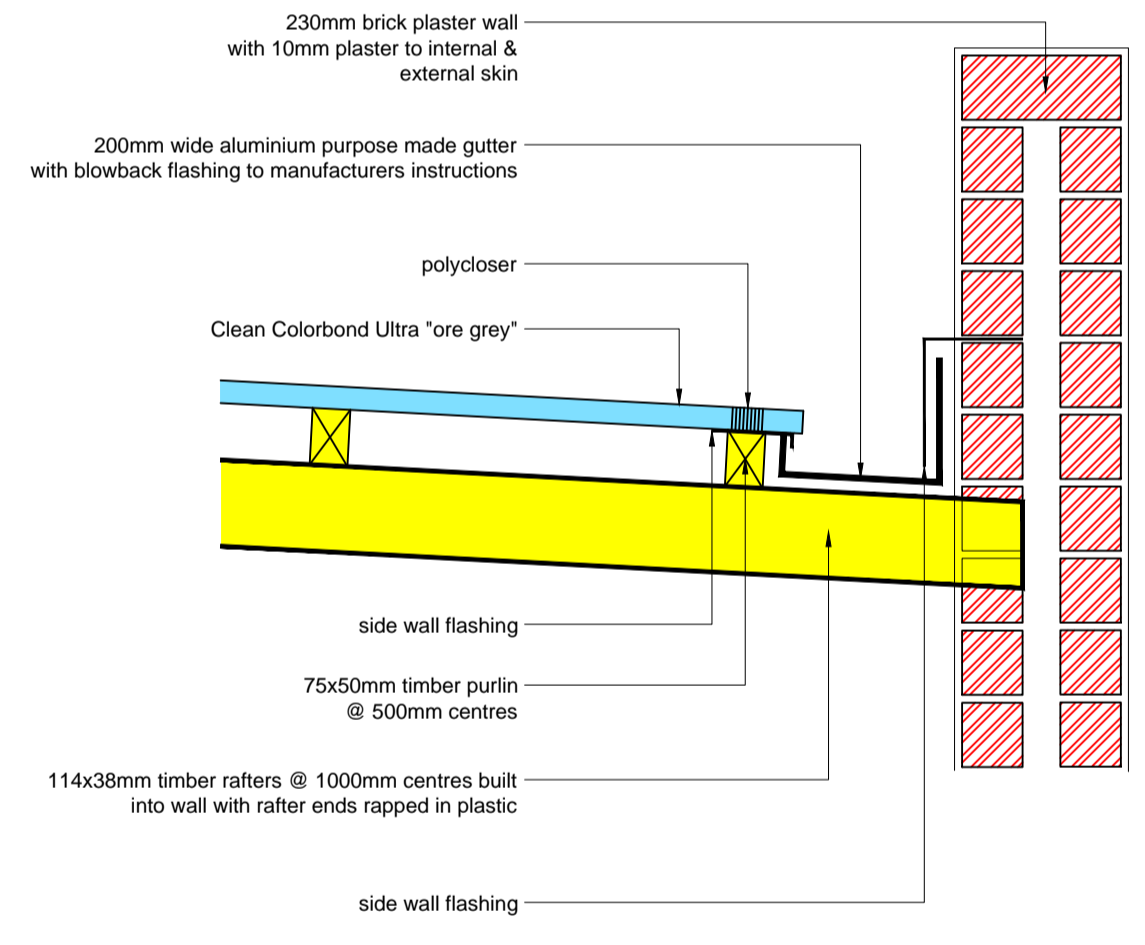


SITE & FLOOR PLAN 1:100

SHOWING SEWERAGE LAYOUT



BOUNDARY WALL SECTION 1:50



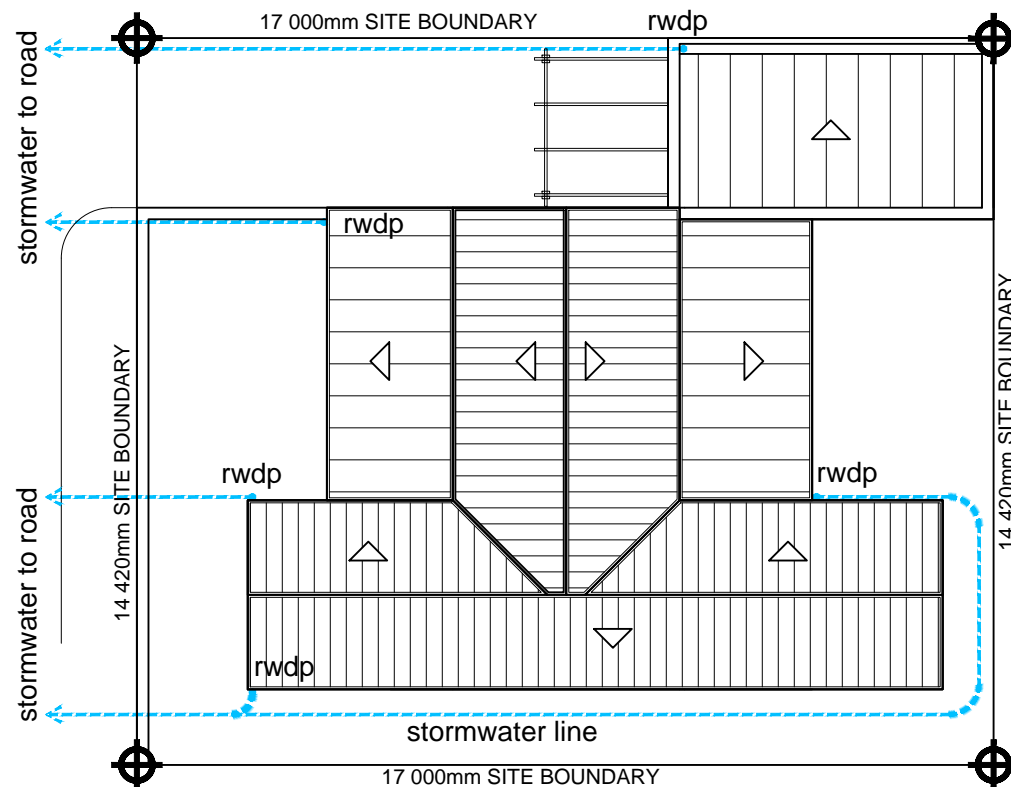
BOX GUTTER DETAIL 1:10
REFER TO SECTION B-B

WINDOW & DOOR SCHEDULE

ALL ALUMINIUM WINDOWS & DOORS TO BE IN ACCORDANCE WITH SANS 10400 & AAAMSA.
ALUMINIUM WINDOW SCHEDULE - POWDER COATED VEDOC VP 7107 - CHARCOAL FINISH.

W1	300x1800	W2	600x1800	W3	900x1800	W4	1200x1200	W5	1200x1800	W6	900x2685	L1	300x700	L2	300x1300
											* aluminium louvre		* aluminium louvre		
QUANTITY	1	QUANTITY	3	QUANTITY	1	QUANTITY	2	QUANTITY	2	QUANTITY	1	QUANTITY	1	QUANTITY	2

D1	900x2100	D2	900x2100	D3	900x2100	D4	1500x2100	GD1	2400x2250
* hollow timber door		* 40mm solid timber door		* Glass Panel door		* Glass Panel door		* Coroma type garage door	
		* 1/2 hr fire door						* Sectional overhead	
QUANTITY	5	QUANTITY	1	QUANTITY	1	QUANTITY	2	QUANTITY	1



SITE & ROOF PLAN 1:150
SHOWING STORMWATER LAYOUT

ORIENTATIONS:

* ORIENTATION TO BE IN ACCORDANCE WITH SANS 204 4.1 & 4.2

NORTH FACING ROOMS WITH WINDOWS:

* LOUNGE, BEDROOM

EAST FACING ROOMS WITH WINDOWS:

* LOUNGE, EN SUITE

SOUTH FACING ROOMS WITH WINDOWS:

* BEDROOMS, BATHROOM

WEST FACING ROOMS WITH WINDOWS:

* NONE

SHADING OVER WINDOWS & DOORS:

* SHADING TO BE IN ACCORDANCE WITH SANS 204 4.3.5.

* NORTH FACADE TO HAVE A OVERHANG OF 1100mm

* EAST, SOUTH & WEST FACADE TO HAVE NO OVERHANG, PARAPET WALL.

EXTERNAL WALLS:

* EXTERNAL WALL IN ACCORDANCE WITH SANS 104XA 4.4.3.

* ACCORDING TO PG. 11 TABLE 3, THE MINIMUM CR- VALUE, IN HOURS FOR EXTERNAL WALLS FOR ZONE 4 ON A H4 OCCUPANCY ARE NOT ALLOWED TO BE LESS THAN 100 hrs.

* ACCORDING TO PG. 11 TABLE 4, A DOUBLE BRICK WALL WITH A DOUBLE BRICK WITH R-VALUE = 1, CAVITY INSULATION TO BE 130 hrs.

FENESTRATION OF ALL GLASS WINDOWS & DOORS:

* FENESTRATION IN ACCORDANCE WITH SANS 104XA 4.4.4

* ALL FENESTRATION AIR INFILTRATION TO BE ACCORDANCE WITH SANS 613.

* BUILDINGS WITH FENESTRATION AREA UP TO 15% OF NETT FLOOR AREA PER STOREY COMPLY AUTOMATICALLY

* BUILDING WITH FENESTRATION AREA GREATER THAN 15% OF NETT FLOOR ARE TO COMPLY WITH SANS 204.

ALLOWABLE CONDUCTANCE ON FLOOR PLAN

* $90.21m^2 \times 1.4 = 126.29$

ALLOWABLE SHGC ON FLOOR PLAN

* $90.21m^2 \times 0.13 = 11.73$

ACTUAL CONDUCTANCE CALCULATIONS

* $14.75m^2 \times 5.6 = 82.60$

ACTUAL SHGC CALCULATIONS

* P/H VALUE NORTH, EAST, SOUT, WEST FACADE

* P = 235mm

* H = 3215mm - 2100mm = 1115mm

* H = 3215mm - 1500mm = 1715mm

1200mm HIGH WINDOW, 1115 + 900 = 235 / 2015mm - P/H 0.12

1800mm HIGH WINDOW, 1115 + 300 = 235 / 1415mm - P/H 0.17

2100mm HIGH WINDOW, 1115 = 235 / 1115mm - P/H 0.21

NORTH FACADE CALCULATIONS (single clear glazing) - 0.97

* W6 - $2.42 \times 0.77 \times 0.52 = 0.97$

EAST FACADE CALCULATIONS (single clear glazing) - 1.16

* W3 - $1.62 \times 0.77 \times 0.93 = 1.16$

SOUTH FACADE CALCULATIONS (single clear glazing) - 1.91

* W4 - $1.44 \times 0.77 \times 0.44 = 0.49$

* W5 - $2.16 \times 0.77 \times 0.47 = 0.78$

* D3 - $1.89 \times 0.77 \times 0.44 = 0.64$

WEST FACADE CALCULATIONS (single clear glazing) - 4.67

* W1 - $0.54 \times 0.77 \times 1.18 = 0.49$

* W2 - $1.08 \times 0.77 \times 1.18 = 0.98$

* W4 - $1.44 \times 0.77 \times 1.12 = 1.24$

* W5 - $2.16 \times 0.77 \times 1.18 = 1.96$

TOTAL SHGC ON GROUND & FIRST FLOOR

* NORTH = 0.97

* EAST = 1.16

* SOUTH = 1.91

* WEST = 4.67

* TOTAL = 8.71 (below 11.73 allowed)

ROOF ASSEMBLY CONSTRUCTION:

* ROOF ASSEMBLY IN ACCORDANCE WITH SANS 104XA 4.4.5

* ROOF ASSEMBLY NEEDS TO ACHIEVE A MINIMUM TOTAL R-VALUE OF 3,7 IN AN UPWARDS DIRECTION IN THE CAPE TOWN AREA.

* METAL ROOF SHEETING R-VALUE 0.30

* SISALATION R-VALUE 3.35

* CEILING R-VALUE 0.05

TOTAL R-VALUE 3.70

* THERMGUARD INSULATION R-VALUE 0.04

* THERMGUARD INSULATION THICKNESS TO BE 120mm

* NO ROOFLIGHTS TO BE USED.

* NO IN-SLAB HEATING TO BE USED.

SERVICES:

* SERVICES IN ACCORDANCE WITH SANS 204 4.5 & 4.6

LIGHTING & POWER:

* LIGHTING IN ACCORDANCE WITH PART O IN SANS 10400.

* H4 OCCUPANCY POPULATION COUNT - 4 PEOPLE per HOUSE.

* H4 OCCUPANCY ENERGY DEMAND - $5 W/m^2$

* H4 OCCUPANCY ENERGY CONSUMPTION - $5 kWh/m^2$

* POWER SAVING BULBS TO BE USE THROUGHOUT THE WHOLE HOUSE.

MECHANICAL VENTILATION & AIR CONDITIONING:

* ALL ROOMS IN PROPOSED DESIGN HAVE A OPENABLE WINDOW OR DOOR FOR NATURAL VENTILATION.

HOT WATER SUPPLY:

* HOT WATER SUPPLY IN ACCORDANCE WITH SANS 10400XA 4.1

* REQUIREMENTS FOR WATER INSTALLATIONS IN BUILDINGS SHALL BE IN ACCORDANCE WITH SANS 10252-1:2004 AND SANS 10252-1 INSTALLATION OF WATER SYSTEMS.

* ALL HOT WATER SERVICE PIPES SHALL BE CLAD WITH INSULATION WITH A MIN. R-VALUE OF 1. (PIPE INTERNAL DIAMETER OF 80mm OR LESS)

* THERMAL INSULATION, IF ANY, SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

* ISOVER GEYSER INSULATION PACK R-VALUE 1.25. SNAP-ON PIPE INSULATION R-VALUE 1.00.

* HEAT PUMP "KWIKHOT" 600KPA 150 litre CYLINDER WITH 3.5KW HEAT PUMP. THE CONTRACTOR IS TO MAKE REASONABLE ALLOWANCE FOR ANY FUTURE SOLAR WATER HEATING INSTALLATIONS.

PROPOSED NEW HOUSE FOR AMPHORIA (PTY) LTD	
ERF	ERF 276 - POR. 5 & 31 - DASSENVALLEY FARM 45
STREET	MEUL ROAD
AREA	PHILADELPHIA
CHECKED	Skalk Steyn
DATE	29 AUGUST 2013
REVISIONS	
DRAWING NUMBER:	1779 / ROOF & XA

**SKALK
STEYN**
ARCHITECTURE