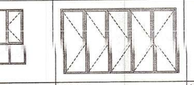
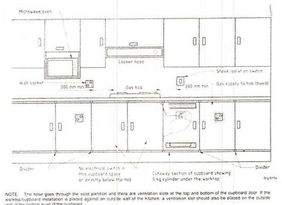
GROUND FLOOR SANS 204 GLAZING CALCULATIONS (GLASS DOORS & WINDOWS)

Climatic Zone	---	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	
ID	NFA - 1 (XA)	W1(XA)	W2(XA)	W3(XA)	W4(XA)	W6(XA)	W7(XA)	W8(XA)	W9(XA)	W10(XA)	
WINDOW											
Orientation	---	WEST	NORTH	NORTH	NORTH	NORTH	NORTH	SOUTH	NORTH	NORTH	
Width	---	4,100	1,500	1,500	3,700	1,200	900	600	900	900	
Height	---	2,125	1,800	1,800	2,125	1,200	1,200	900	900	900	
TOTAL GLAZED AREA	---	8.71	2.70	2.70	7.86	1.44	1.08	0.54	0.81	0.81	*26.66*
Frame & Glazing Types	---	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	Alu/Steel - Single-Lo…	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	
U Value	---	5.73	5.73	5.73	5.73	5.73	5.73	5.73	5.73	5.73	
AGGREGATE CONDUCTANCE	---	49.92	15.47	15.47	45.05	8.25	6.19	3.09	4.64	4.64	*152.73*
P Value	---	4,000	715	715	715	715	715	1,800	715	715	
H Value	---	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	
G Value	---	-325	0	0	-325	600	600	900	900	900	
G Effect	---	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	
G Effect x P / H	---	2.22	0.40	0.40	0.40	0.20	0.20	0.20	0.20	0.20	
E Factor	---	0.31	0.40	0.40	0.40	0.58	0.58	0.47	0.58	0.58	
SHGC Value	---	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	
AGGREGATE SHGC	---	1.78	0.71	0.71	2.08	0.55	0.41	0.17	0.31	0.31	*7.04*
NETT FLOOR AREA	144.87	---	---	---	---	---	---	---	---	---	*144.87 m²*

DOOR SCHEDULE

NUMBER	D1	D2	D3	D4	D5	D6	D7
QTY	2	1	1	11	2	1	2
W x H SIZE	2,440x2,125	1,000x2,032	813x2,032	813x2,032	813x2,032	900x2,125	813x1,950
ELEVATION							
FRAME	-	TIMBER	TIMBER	TIMBER	TIMBER	-	TIMBER
DOOR	2440 SECT TIMBER O/H GARAGE	40mm SOLID TIMBER	30min E-RATED FIRE DOOR	40mm HOLLOCORE	40mm SOLID TIMBER	40mm HOLLOCORE SURFACE SLIDER	40mm SOLID TIMBER WEATHERPROOFED OUTDOOR USE



NOTE: The hose goes through the solid partition and there are ventilation slots at the top and bottom of the cupboard door. If the worktop/cupboard installation is placed against an outside wall of the kitchen, a ventilation slot should also be placed on the outside wall in the bottom level of the cupboard.

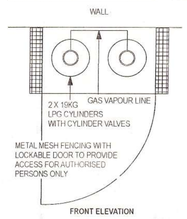
SPECIAL NOTES:

WALL SOCKETS TO BE A MINIMUM OF 200mm AWAY FROM THE SIDE OF THE COOKING APPLIANCE
ISOLATION SWITCH TO BE A MINIMUM OF 200mm AWAY FROM THE SIDE OF THE COOKING APPLIANCE
NO PLUG POINTS ARE TO BE PLACED IN THE SAME CUPBOARD AS THE COOKING APPLIANCE
ELECTRICAL CONNECTIONS ARE TO BE CONNECTED DIRECTLY TO THE COOKING APPLIANCE
GAS CYLINDER MAY NOT BE PLACED ABOVE THE COOKING APPLIANCE
GAS CYLINDER MAY NOT BE PLACED IN PANTRIES OR STORAGE ROOMS
NO ELECTRICAL POINTS/PLUGS/SOCKETS ARE TO BE PLACED IN THE SAME CUPBOARD AS THE GAS CYLINDER
VENTILATION MUST BE PROMINENT IN THE CYLINDER HOUSING CUPBOARD

IF 48kg BOTTLES ARE USED = HOUSING DIMS 1100 X 541 X 1600

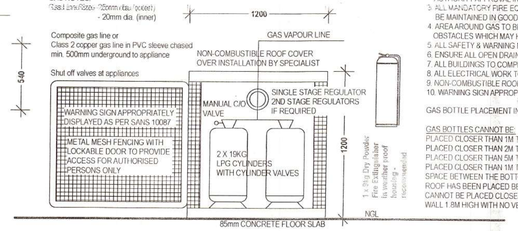
GAS INSTALLATION AND PIPE LINES TO BE INSTALLED BY REGISTERED INSTALLER, IN ACCORDANCE WITH REGULATIONS OF SANS 10087 PART 1

GAS NOTES:
Cast Iron/Steel - 75mm dia. (3") socket
- 20mm dia. (inner)



FRONT ELEVATION

GAS CYLINDER HOUSING - SCALE 1:25



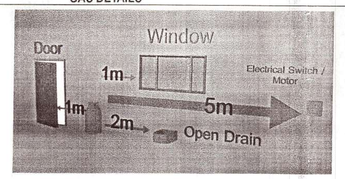
PLAN VIEW

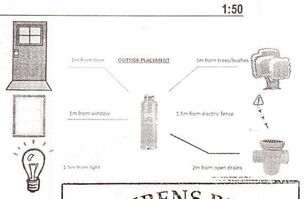
GAS NOTES:
1. ALL SIZES & SAFETY DISTANCES TO BE CHECKED ON SITE & MUST BE IN COMPLIANCE WITH SANS 10087.
2. THIS INSTALLATION IS SUBJECT TO COMPLIANCE WITH STANDARDS & LOCAL AUTHORITY APPROVAL INCLUDING ALL BYLAWS PERTAINING TO GAS INSTALLATIONS.
3. ALL MANDATORY FIRE EQUIPMENT TO BE PRESENT AT ALL TIMES AND IS TO BE MAINTAINED IN GOOD WORKING ORDER.
4. AREA AROUND GAS TO BE KEPT CLEAR OF COMBUSTIBLE MATERIALS & POSSIBLE OBSTACLES WHICH MAY HINDER ACCESS TO THE SAID FACILITY.
5. ALL SAFETY & WARNING NOTICES TO BE PROMINENTLY DISPLAYED.
6. ENSURE ALL OPEN DRAINS ARE SEALED OR BUILT UP.
7. ALL BUILDINGS TO COMPLY WITH SABS 0400.
8. ALL ELECTRICAL WORK TO COMPLY WITH SABS STANDARDS.
9. NON-COMBUSTIBLE ROOF COVER OVER INSTALLATION TO BE SUPPLIED.
10. WARNING SIGN APPROPRIATELY DISPLAYED AS PER SANS 10087

GAS BOTTLE PLACEMENT IN ACCORDANCE WITH SANS 10087

GAS BOTTLES CANNOT BE:
PLACED CLOSER THAN 1M TO A DOOR
PLACED CLOSER THAN 2M TO AN OPEN DRAIN/GULLEY WHERE THE GAS CAN LEAK INTO
PLACED CLOSER THAN 5M TO AN ELECTRICAL SWITCH, MOTOR, GENERATOR, POOL PUMP, ETC.
PLACED CLOSER THAN 1M TO THE SIDE OF A WINDOW UNLESS THERE IS AT LEAST 300MM SPACE BETWEEN THE BOTTOM OF THE WINDOW AND THE TOP OF THE BOTTLE AND A NON COMBUSTABLE ROOF HAS BEEN PLACED BETWEEN THE BOTTLES AND THE WINDOW
CANNOT BE PLACED CLOSER THAN 1M TO A BOUNDARY WALL UNLESS THE WALL IS A DOUBLE BRICK WALL 1.8M HIGH WITH NO VENTILATION GAPS IN THE WALL

GAS DETAILS 1:50





ELECTRICAL LEGEND

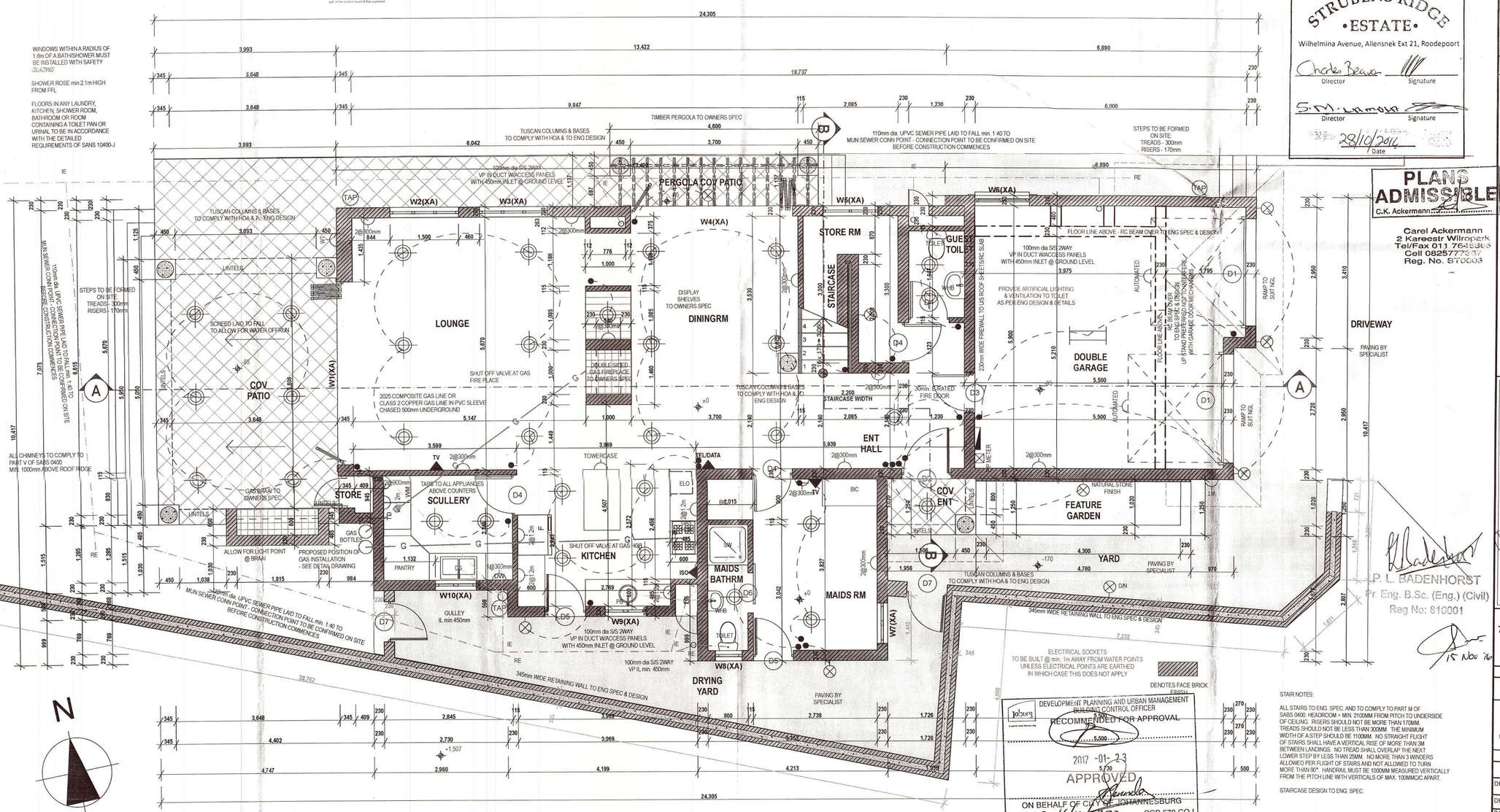
TV	TV POINT
2@300mm	15AMP DOUBLE PLUG @ 300mm FROM FFL
2@1.2m	15AMP DOUBLE PLUG @ 1200mm FROM FFL
1@300mm	15AMP SINGLE PLUG @ 300mm FROM FFL
A/C	AIR-CONDITIONER UNIT CONDENSER TO BE PLACED IN YARD
TELDATA	TELEPHONE / DATA POINT
ISO	ISOLATOR SWITCH @ 1200mm FROM FFL
SH	POWER POINTS FOR SHAVER, HAIRDRYER, ELECTRIC TOOTHBRUSH ETC
	DISTRIBUTION BOARD
G	GEYSER - SIZE AS PER CONTRACT
PrP METER	PRE-PAID ELECTRICITY METER
	IPTV DECODER/TELEPHONE/TILGIN & UPS
	DOUBLE FLUORESCENT LIGHT - 1500mm
	LIGHT SWITCH - 1WAY/2WAY/3WAY DIMMER LIGHT SWITCH - 1WAY/2WAY/3WAY
	RECESSED DOWN LIGHTER
	RECESSED DOWN LIGHTS/ CEILING LIGHTS/PENDANTS
	WALL MOUNTED LIGHT FITTING
WT	WATER TIGHT 15 AMP PLUG @ 300mm FROM NGL
	CEILING FAN + LIGHT POINT
TAP	WATER POINT
POOL	POOL LIGHT WIRED FROM DB
DP	DATA POINT
TC PLUG	TOWER CASE PLUG
	CEILING HATCH

D/N = DAY NIGHT SWITCH

WINDOWS WITHIN A RADIUS OF 1.8m OF A BATH/SHOWER MUST BE INSTALLED WITH SAFETY GLAZING

SHOWER ROSE min 2.1m HIGH FROM FFL

FLOORS IN ANY LAUNDRY, KITCHEN, SHOWER ROOM, BATHROOM OR ROOM CONTAINING A TOILET PAN OR URINAL TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-J



GROUND STOREY FLOOR PLAN 1:50

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2017 -01- 23
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. BCP 570 COJ

STAIR NOTES:
ALL STAIRS TO ENG. SPEC. AND TO COMPLY TO PART M OF SABS 0400. HEADROOM = MIN. 2100MM FROM PITCH TO UNDERSIDE OF CEILING. RISERS SHOULD NOT BE MORE THAN 170MM. TREADS SHOULD NOT BE LESS THAN 300MM. THE MINIMUM WIDTH OF A STEP SHOULD BE 1100MM. NO STRAIGHT FLIGHT OF STAIRS SHALL HAVE A VERTICAL RISE OF MORE THAN 3M BETWEEN LANDINGS. NO TREAD SHALL OVERLAP THE NEXT LOWER STEP BY LESS THAN 25MM. NO MORE THAN 3 WINDERS ALLOWED PER FLIGHT OF STAIRS AND NOT ALLOWED TO TURN MORE THAN 90°. HANDRAIL MUST BE 1000MM MEASURED VERTICALLY FROM THE PITCH LINE WITH VERTICALS OF MAX. 100MM C/C APART.

STAIRCASE DESIGN TO ENG. SPEC.

REVISIONS

REV	DESCRIPTION	DATE

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2
(NOT INCLUDED IN TOTALS)

ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort

Charles Beaver — Director — Signature
S.M. Lamont — Director — Signature
28/10/2016 — Date

PLANS ADMISSIBLE
C.K. Ackermann

Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 76[illegible]
Cell 082577[illegible]
Reg. No. ST0603

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract.
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 366 1485
FAX 086 529 3632
E-MAIL: danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT SACAP 3594

P. L. BADENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001
15 Nov '16

PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 STRUBENS RIDGE ESTATE
ROODEPOORT.

DRAWING NAME:
GFP/SCHED/

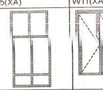
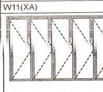
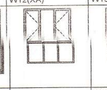
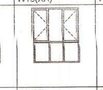
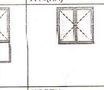
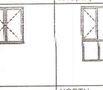
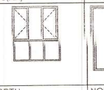
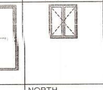
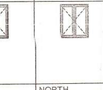
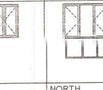
DOOR SCHEDULE, GROUND FLOOR GLAZING CALCULATIONS (20d), GROUND STOREY FLOOR PLAN, ELECTRICAL LEGEND, GAS INSIDE HOUSE, GAS OUTSIDE-1, Safety/Distances, GAS DETAILS

PROJECT STATUS
COUNCIL SUBMISSION

DRAWN BY: JVW	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT / DATE PUBLISHED	28 SEP 2016 / Tuesday, 18 October 2016
DRAWING NUMBER	REVISION NUMBER
706/01	

This drawing is the property of the Architect and may not be used without his permission

FIRST FLOOR GLAZING CALCULATIONS (204) (GLASS DOORS & WINDOWS)

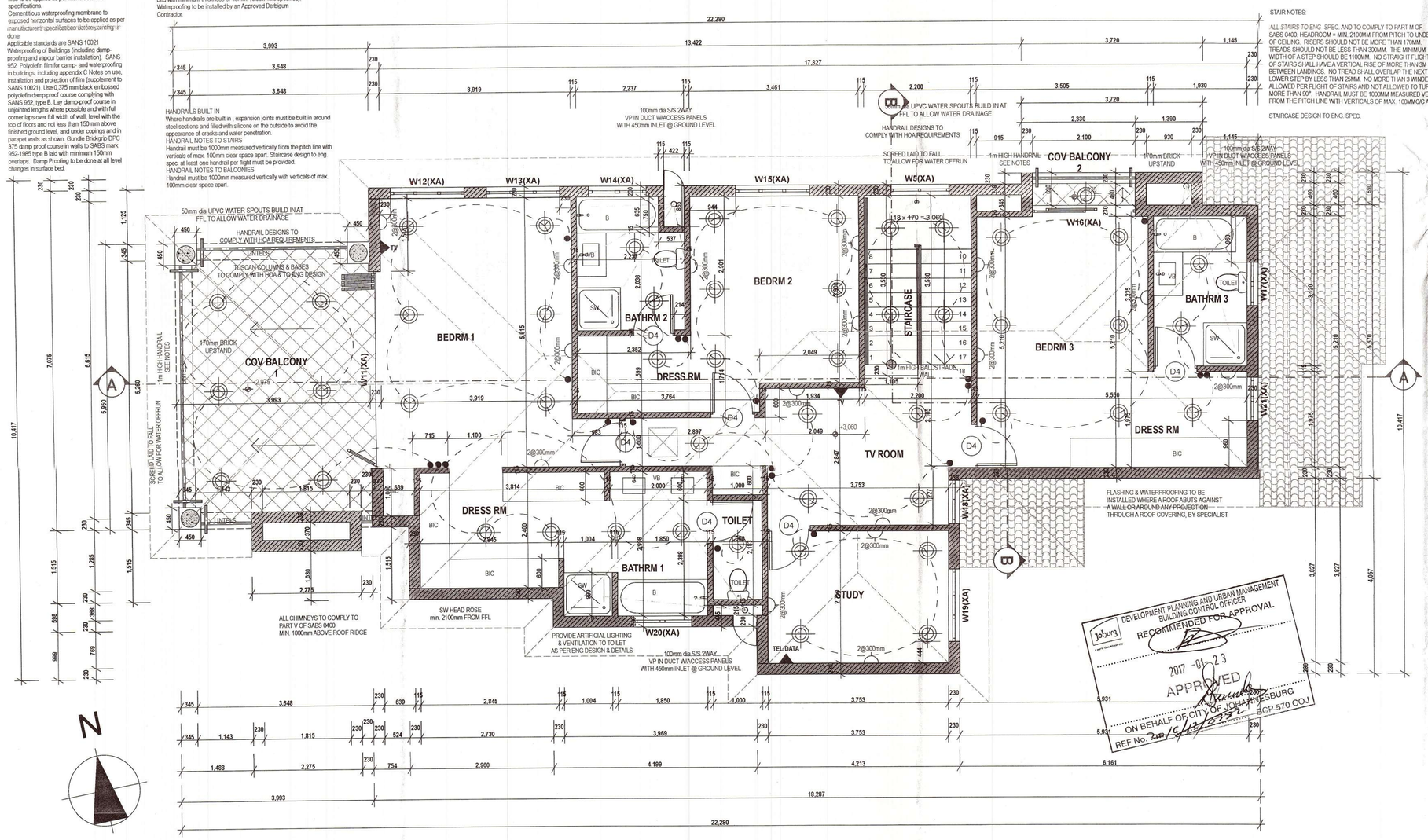
Climatic Zone	---	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	Climatic Zone 1	
ID	NFA - 1 (XA)	W5(XA)	W11(XA)	W12(XA)	W13(XA)	W14(XA)	W15(XA)	W16(XA)	W17(XA)	W18(XA)	W19(XA)	W20(XA)	W21(XA)	
WINDOW														
Orientation	---	NORTH	WEST	NORTH	NORTH	NORTH	NORTH	NORTH	NORTH	NORTH	NORTH	NORTH	NORTH	
Width	---	1,200	4,100	1,500	1,500	1,200	1,500	2,100	900	900	1,500	1,200	900	
Height	---	2,500	2,125	1,800	1,800	1,200	1,800	2,125	1,100	1,100	1,800	1,200	1,100	
TOTAL GLAZED AREA	---	3.00	8.71	2.70	2.70	1.44	2.70	4.46	0.99	0.99	2.70	1.44	0.99	*32.82*
Frame & Glazing Types	---	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	Alu/Steel - Single-Low E	Alu/Steel - Single-Low E	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM	TESTED SYSTEM
U Value	---	4.50	4.50	4.50	4.50	5.73	5.73	4.50	4.50	4.50	4.50	4.50	4.50	
AGGREGATE CONDUCTANCE	---	13.50	39.21	12.15	12.15	8.25	15.47	20.08	4.46	4.46	12.15	6.48	4.46	*152.80*
P Value	---	715	4,000	715	715	715	715	715	715	715	715	715	715	
H Value	---	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	
G Value	---	-700	-325	0	0	600	0	-325	700	700	0	600	700	
G Effect	---	1.00	1.00	1.00	1.00	0.50	1.00	1.00	0.50	0.50	1.00	0.50	0.50	
G Effect x P / H	---	0.40	2.22	0.40	0.40	0.20	0.40	0.40	0.20	0.20	0.40	0.20	0.20	
E Factor	---	0.40	0.31	0.40	0.40	0.58	0.40	0.40	0.58	0.58	0.40	0.58	0.58	
SHGC Value	---	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	
AGGREGATE SHGC	---	0.79	1.78	0.71	0.71	0.55	0.71	1.18	0.38	0.38	0.71	0.55	0.38	*8.84*
NETT FLOOR AREA	129.63	---	---	---	---	---	---	---	---	---	---	---	---	*129.63 m²*

WATERPROOFING TO BALCONIES NOTES:

Cementitious waterproofing membrane under tiles to be applied as per manufacturer's specifications.
Cementitious waterproofing membrane to exposed horizontal surfaces to be applied as per manufacturer's specifications before painting is done.
Applicable standards are SANS 10021
Waterproofing of Buildings (including damp-proofing and vapour barrier installation). SANS 952 Polyolefin film for damp- and waterproofing in buildings, including appendix C Notes on use, installation and protection of film (supplement to SANS 10021). Use 0,375 mm black embossed polyolefin damp-proof course complying with SANS 952, type B. Lay damp-proof course in unjointed lengths where possible and with full corner laps over full width of wall, level with the top of floors and not less than 150 mm above finished ground level, and under copings and in parapet walls as shown. Gundle Bridging DPC 375 damp proof course in walls to SABS mark 952-1985 type B laid with minimum 150mm overlaps. Damp Proofing to be done at all level changes in surface bed.

One layer Derbigum CG3 and one layer Derbigum CG4 waterproofing membrane, with 75mm side laps and 100mm end laps, sealed together and to primed surfaces to falls and cross falls by 'torch-fusion', followed by one layer 250 micron plastic sheeting with 50mm laps, loose laid on waterproofing as isolation/ protection layer, to receive fully bonded tiles/paving on a mortar bed with minimum thickness of 45mm, (elsewhere specified). Waterproofing to be installed by an Approved Derbigum Contractor.

HANDRAILS BUILT IN
Where handrails are built in , expansion joints must be built in around steel sections and filled with silicone on the outside to avoid the appearance of cracks and water penetration.
HANDRAIL NOTES TO STAIRS
Handrail must be 1000mm measured vertically from the pitch line with verticals of max. 100mm clear space apart. Staircase design to eng. spec. at least one handrail per flight must be provided.
HANDRAIL NOTES TO BALCONIES
Handrail must be 1000mm measured vertically with verticals of max. 100mm clear space apart.



FIRST STOREY PLAN 1:50

* DRAINAGE IL @ 450mm MINIMUM

1. SINGLE STACK SYSTEM COMPLYING WITH THE NATIONAL BUILDING REGULATIONSAND THE REQUIREMENTS OF THE LOCAL AUTHORITY AND COMPRISING THE FOLLOWING:
   1. 100Ø DISCHARGE STACKS OF APPROVED MATERIAL
   2. 100Ø DRAINS OF APPROVED MATERIAL
   3. 100Ø SOIL PIPES
   4. 100Ø SABS WASTE PIPES
   5. 100Ø STACK VENTS
2. THE DISCHARGE STACK WILL CONTINUE UPWARDS TO FORM THE STACK VENT.
3. THE RADIUS AT THE CENTRE LINE OF THE BEND AT THE FOOT OF THE DISCHARGE STACK SHALL NOT BE LESS THAN 300mm
4. EVERY WASTE FIXTURE SHALL BE EITHER A P-TRAP WITH A WATERSEAL NOT LESS THAN 25mm OR A RE-SEALING TRAP OF THE P-TYPE.
5. WHERE ANY WASTE BRANCH AND ANY OPPOSED SOIL BRANCH ARE CONNECTED TO A DISCHARGE STACK THE CENTRE LINES AT THEIR INTERSECTIONS SHALL NOT BE LESS THAN 200mm APART
6. THE FIXTURE BRANCH OF ALL SANITARY FIXTURES IN THE SANITARY GROUP SHALL BE SEPERATELY CONNECTED TO THE DISCHARGE STACK. THERE IS ONLY ONE GROUP PER STOREY CONNECTED TO ONE STACK.
6. ACCESS TO THE DRAINAGE INSTALLATION TO BE PROVIDED BY ADEQUATELY MARKED AND PROTECTED AND PERMANENTLY ACCESSIBLE RODDING EYES AT
   1. ALL CHANGES OF DIRECTION
   2. WITHIN 1.5m OF THE DRAIN CONNECTION TO SEWER
   3. AT THE HIGHEST POINT OF THE DRAIN
   4. AT 25m INTERVALS ALONG THE LINE OF THE DRAIN.
7. PROVIDE INSPECTION EYES AT ALL BENDS AND JUNCTIONS.
8. 100mmØ PVC SOIL PIPE IN GROUND TO FALL MIN 1:60 & MAX 1:16
9. 40mmØ WASTE PIPE TO ALL SINKS & WHB'S. 50mmØ WASTE PIPES TO ALL BATHS AND SHOWERS & WASHING MACHINES 100mmØ SOIL PIPE TO ALL WC'S
10. ALL SEWERS PASSING BELOW A BUILDING TO BE PROTECTED FROM LOAD AND THERE IS TO BE AN INSPECTION EYE AT START AND END OF BUILDING/FOUNDATION.
11. ALL VENT PIPES TO FINISH IN THE ROOF BY WAY OF A ONE WAY VALVE
12. PROVIDE RE @ 1500mm FROM THE MUN. SEWER CONN.

GEYSER AS PER SABS 10254

STANDARD NOTES:

ALL WORK TO COMPLY WITH NATIONAL BUILDING REGULATIONS & BUILDING STANDARDS ACT SABS 0400 1990, LOCAL COUNCIL REQUIREMENTS & ALL RELEVANT SPECIFICATIONS AND CODES.

1. WHERE HANDRAILS ARE BUILT IN , EXPANSION JOINTS MUST BE BUILT IN AROUND STEEL SECTIONS AND FILLED WITH SILICONE ON THE OUTSIDE TO AVOID THE APPEARANCE OF CRACKS AND WATER PENETRATION
2. PIPES ON SURFACES OTHER THAN IN DUCTS WILL NOT BE ALLOWED.
3. GUARANTEE FOR WATERPROOFING TO BE PROVIDED, MATERIAL AND WORKMANSHIP.
4. ALL HORIZONTAL PLASTER SURFACES TO BE WATERPROOFED WITH FIBRE-GLASS STRIPS AND ARE TO BE FINISHED WITH A LAYER OF SMOOTH PLASTER AND IS TO SLOPE TO INSIDE TO AVOID DIRT MARKS ON EXTERIOR OF PLASTER AND PAINTED SURFACES
5. ENGINEER'S INPUT REGARDING THE FOLLOWING REQUIRED:
   ROADS AND STORMWATER
   FOUNDATIONS
   WALLS EXCEEDING 2.3m IN HEIGHT
   FLOORSLABS
   STIFFENING OF STRUCTURE WHERE REQUIRED.
6. ALL MEASUREMENTS MUST BE CHECKED ON SITE BEFORE BUILDING WORK COMMENCES. ANY DISCREPANCIES MUST BE DISCUSSED WITH THE ARCHITECT BEFORE WORK IS CARRIED OUT.
7. ANY DISCREPANCIES TO BE DISCUSSED WITH ARCHITECT BEFORE CONSTRUCTION STARTS.
8. DO NOT SCALE FROM DRAWINGS. FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALING. OVERALL DIMENSIONS (EXTERNAL) TO TAKE PRECEDENCE.
9. AN ENGINEER MUST BE APPOINTED TO DESIGN ALL STORMWATER ON THE SITE.
10. ALL PLASTER MUST BE KEPT WET DURING THE CURING PROCESS TO AVOID CRACKS LATER ON.
11. NATURAL GROUND LEVEL TO BE 150mm MIN BELOW UNFINISHED FLOOR LEVEL UNLESS OTHERWISE SHOWN.
12. ALL EXTERIOR BALCONIES AND STAIRCASES TO BE TREATED WITH APPROVED CEMENTITIOUS WATERPROOFING ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS BEFORE TILES ARE LAID.
13. ALL BUILT IN CUPBOARDS AND KITCHEN CUPBOARDS MUST BE CONSTRUCTED ACCORDING TO THE LAYOUTS PROVIDED BY SPECIALISTS.
14. FINAL GROUND LEVELS TO BE DISCUSSED WITH ARCHITECT PRIOR TO ANY EXCAVATION ON SITE.
    GROUNDWORKS ARE NOT SHOWN ON DRAWINGS. THE SYSTEM OF GOUNDWORKS AND/OR EXCAVATIONS ACCORDING TO ENGINEER'S DRAWINGS, ANY RESULTANT COSTS WILL BE FOR THE ACCOUNT OF THE CONTRACTOR, E.G. THE USE OF LOFEILS, HANDRAILS TO HIGH AREAS AS REQUIRED BY THE BUILDING REGULATIONS, ETC.
15. A CEILING HATCH MUST BE PROVIDED TO THE ROOF SPACE
16. NO CORRUGATED IRON OR SCALLOPED TO PASS THROUGH FIREWALLS. WHERE BATTENS/PURLINS PASS THROUGH FIREWALLS FOR FIXING OF TILES ETC. PAINTING OF SUCH BATTENS/PURLINS WITH A FIRE RETARDING PAINT HAS BEEN ACCEPTED IN THE PAST.
    TRUSSES ARE NOT ALLOWED TO PASS THROUGH FIREWALLS.
    A PRODUCT THAT CAN BE USED FOR PAINTING IS 'INTSAVE' BY 'MICON COATINGS'
    BATTENS MUST BE PAINTED FOR 500mm ON EITHER SIDE OF CROSSING OF FIREWALL
    THIS COATING CONSISTS OF A BASE COAT AND VINYL TOP COAT
    ALTERNATIVE PRODUCTS ARE ALSO AVAILABLE ON THE MARKET
17. NOT APPLICABLE
18. THE POSITION OF DOWNPIPES OVER BALCONIES TO BE DISCUSSED WITH ARCHITECT ON SITE. ONE DOWNPIPE TO EACH BALCONY TO BE PROVIDED.
19. ADEQUATE LIGHTNING PROTECTION TO BE PROVIDED.
20. BALCONIES AND LANDINGS TO RECEIVE A FULLBORE AND AN EMERGENCY SPOUT OUTLET LOWER THAN INTERNAL FLOOR LEVEL.
21. THE ARCHITECT DOES NOT TAKE RESPONSIBILITY FOR ANY WORK DONE BEFORE DRAWINGS HAVE BEEN APPROVED BY LOCAL AUTHORITY.
22. ALL GLAZING SHALL BE IN STRICT CONFORMANCE WITH GLASS MANUFACTURER'S RECOMMENDATIONS @ ALL IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS PART N, SABS 0137, SABS 0400, SABS 1263 AND AAAMSA SELECTION GUIDE.
    FOR SAFETY GLAZING MATERIALS.
    ALL SAFETY GLAZING MATERIALS (EACH PANE) SHALL BE PERMANENTLY MARKED AND SUCH MUST BE VISIBLE AFTER GLAZING. PERMANENT MARKINGS MUST BE FOR GLASS CODE 1 - HUMAN IMPACT. TOUGHENED SAFETY GLASS MUST BE USED.
    ALL GLASS PANES BELOW 500mm MEASURED FROM FLOOR MUST BE SAFETY GLASS.
    GLASS PANES MEASURED 1.8m FROM FLOOR ON STAIRCASES MUST BE SAFETY GLAZING.
    THE DESIGN WIND PRESSURE AS PER SABS 0160-1989 FALLS INTO CATEGORY 3, A1 AND A2. THE ACTUAL WIND LOADS TO BE CONFIRMED BY CONTRACTOR. WINDOW FRAMES USED MUST BE THE CORRECT SIZES FOR THE EXPECTED WIND LOADS OF BETWEEN 1000Pa AND 1500Pa (A1 AND A2) AT THE TOP OF THE BUILDING, DEPENDING ON THE ACTUAL FRAME PROFILE. THE THICKNESS OF A GLASS PANE IN RELATION TO IT'S AREA SHALL BE IN ACCORDANCE WITH SABS 0137. SUCH PANE SHALL BE FIXED IN THE FRAME IN ACCORDANCE WITH ANY SUITABLE METHOD DESIGNED IN SABS 0137 AND SUCH FRAME SHALL BE SO INSTALLED THAT IT IS CAPABLE OF SUSTAINING THE TOTAL WIND LOAD FOR WHICH SUCH PANE WAS DESIGNED. REFER TO THE AAAMSA GUIDELINES FOR MAXIMUM PANE SIZES AND GLASS THICKNESSES.
    POSITION OF SEWER CONNECTION TO BE CHECKED ON SITE BEFORE CONSTRUCTION STARTS.
23. ALL DOORS TO THE EXTERIOR THAT OPEN OUTWARDS ARE TO HAVE A 10mm STEP UP ALONG THE LONGITUDINAL CENTRE LINE OF THE DOOR LEAF. A BRASS OR ALUMINIUM STRIP IS TO BE INSTALLED TO THE THRESHOLD. ALL REINFORCED CONCRETE TO BE TO STRUCTURAL ENGINEER'S CERTIFICATE & DETAIL TO BE SUBMITTED.
24. VERTICAL TANKING TO ALL LEVEL CHANGES TO BE IN STRICT ACCORDANCE WITH ENGINEER'S DETAIL AND SPECIALIST'S SPECIFICATION
25. NATURAL LIGHT & VENTILATION TO COMPLY WITH PART O & N OF THE NATIONAL BUILDING REGULATIONS
26. STRUCTURAL ENGINEER TO BE RESPONSIBLE FOR ALL STRUCTURAL WORK INCLUDING BOUNDARY WALL, FOUNDATIONS, SOIL CONDITIONS, SLABS, R.C. BEAMS, COLUMNS AND EXPANSION JOINTS.
27. GEYSER INSTALLATION TO COMPLY WITH SABS0254
28. FLOORS IN ANY LAUNDRY, KITCHEN, SHOWER ROOM, BATHROOM OR ROOM CONTAINING A TOILET PAN OR URINAL TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-J

STAIR NOTES:

ALL STAIRS TO ENG SPEC. AND TO COMPLY TO PART M OF SABS 0400. HEADROOM > MIN. 2100MM FROM PITCH TO UNDERSIDE OF CEILING. RISERS SHOULD NOT BE MORE THAN 170MM. TREADS SHOULD NOT BE LESS THAN 300MM. THE MINIMUM WIDTH OF A STEP SHOULD BE 1100MM. NO STRAIGHT FLIGHT OF STAIRS SHALL HAVE A VERTICAL RISE OF MORE THAN 3M BETWEEN LANDINGS. NO TREAD SHALL OVERLAP THE NEXT LOWER STEP BY LESS THAN 25MM. NO MORE THAN 3 WINDERS ALLOWED PER FLIGHT OF STAIRS AND NOT ALLOWED TO TURN MORE THAN 90°. HANDRAIL MUST BE 1000MM MEASURED VERTICALLY FROM THE PITCH LINE WITH VERTICALS OF MAX. 100MM C/C APART.

STAIRCASE DESIGN TO ENG. SPEC.

DEVELOPMENT PLANNING AND URBAN MANAGEMENT BUILDING CONTROL OFFICER
Joburg
RECOMMENDED FOR APPROVAL
2017 -01- 23
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2016/2332 ACP 570 COJ

ELECTRICAL LEGEND

TV	TV POINT
2@300mm	15AMP DOUBLE PLUG @ 300mm FROM FFL
2@1.2m	15AMP DOUBLE PLUG @ 1200mm FROM FFL
1@300mm	15AMP SINGLE PLUG @ 300mm FROM FFL
A/C	AIR-CONDITIONER UNIT CONDENSER TO BE PLACED IN YARD
TEL/DATA	TELEPHONE / DATA POINT
ISO	ISOLATOR SWITCH @ 1200mm FROM FFL
SH	POWER POINTS FOR SHAVER, HAIRDRYER, ELECTRIC TOOTHBRUSH ETC
	DISTRIBUTION BOARD
G	GEYSER - SIZE AS PER CONTRACT
PRP METERS	PRE-PAID ELECTRICITY METER
	IPTV DECODER/TELEPHONE/TILGIN & UPS
	DOUBLE FLUORESCENT LIGHT - 1500mm
	LIGHT SWITCH - 1WAY/2WAY/3WAY DIMMER LIGHT SWITCH - 1WAY/2WAY/3WAY
	RECESSED DOWN LIGHTER
	RECESSED DOWN LIGHTS/ CEILING LIGHTS/PENDANTS
	WALL MOUNTED LIGHT FITTING
WT	WATER TIGHT 15 AMP PLUG @ 300mm FROM NGL
	CEILING FAN + LIGHT POINT
TAP	WATER POINT
POOL	POOL LIGHT WIRED FROM DB
DP	DATA POINT
TC PLUG	TOWER CASE PLUG
	CEILING HATCH

D/N = DAY NIGHT SWITCH

REVISIONS

REV	DESCRIPTION	DATE

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2 (NOT INCLUDED IN TOTALS)

ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort

Charles Bezuen — Director — Signature
S.M. Lamola — Director — Signature
28/10/2016 — Date

PLANS ADMISSIBLE
C.K. Ackermann:

Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 7645365
Cell 0825777937
Reg. No. ST0003
P. L. BUSSENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001

danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 366 1485
FAX 086 529 3632
E-MAIL: danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT
SACAP 3594

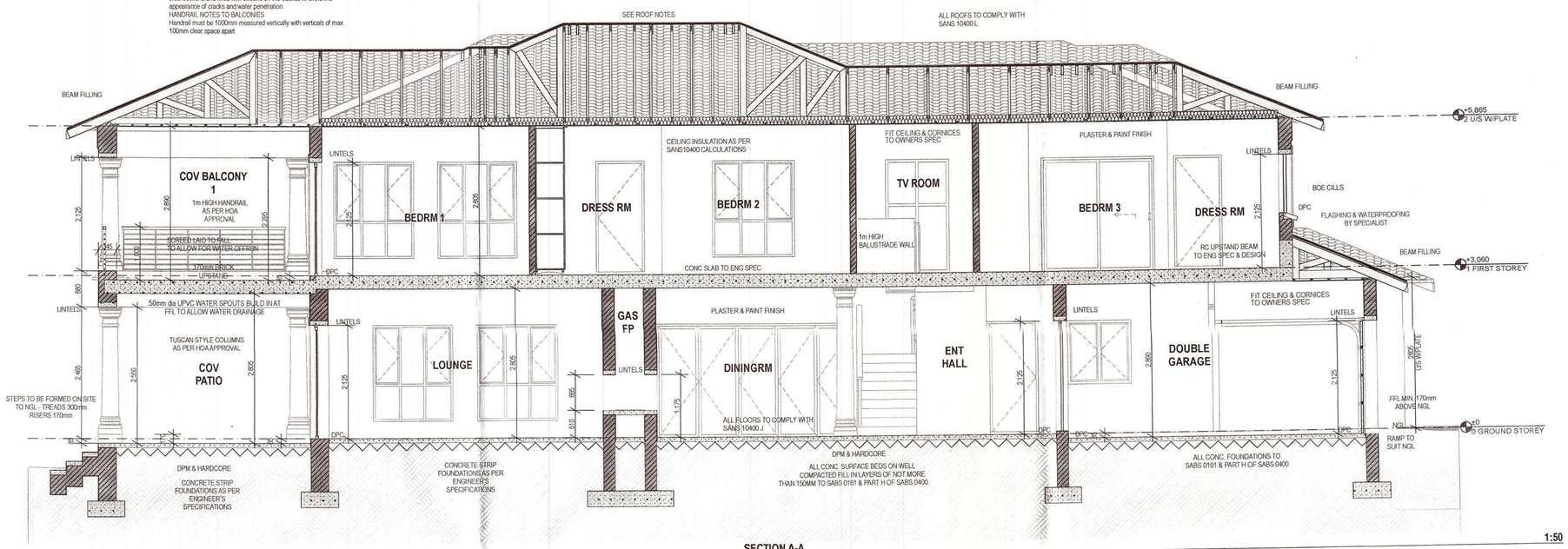
PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 STRUBENS RIDGE ESTATE
ROODEPOORT

DRAWING NAME:	
FFP/SCHED/	
FIRST FLOOR GLAZING CALCULATIONS (204), FIRST STOREY PLAN, ELECTRICAL LEGEND, NOTES	
PROJECT STATUS	
COUNCIL SUBMISSION	
DRAWN BY: JVW	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT	28 SEP 2016
DATE PUBLISHED	Tuesday, 18 October 2016
DRAWING NUMBER	REVISION NUMBER
706/02	

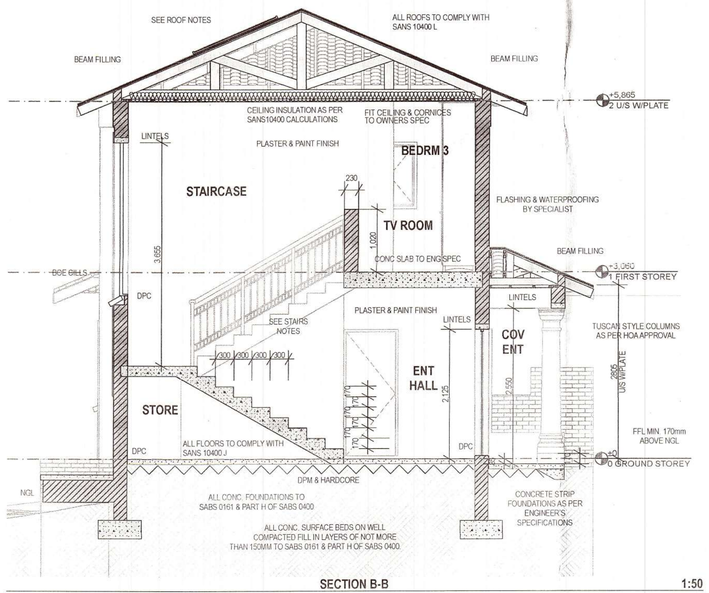
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the author.

Allens/WIP/PERSP/BF1 STRUBENSRIDGE A CONSTRUCTION DWG/SKETCHUP FILE WIP1.skp

HANDRAILS BUILT IN
Where handrails are built in , expansion joints must be built in around steel sections and filled with silicone on the outside to avoid the appearance of cracks and water penetration.
HANDRAIL NOTES TO BALCONIES
Handrail must be 1000mm measured vertically with verticals of max. 100mm clear space apart.



SECTION A-A 1:50



SECTION B-B 1:50

TABLE 15 - PERMISSIBLE DEVIATIONS IN FLOORS AND CEILINGS

1	2	3	4
Description	PD, mm		
	Grade		
	III	II	I
Floors: level of finished surface			
PD from the designed level of any point on a floor surface	± 20	± 15	± 10
PD in level between any two points 6 m apart, max.	15	10	5
PD at any point under a 3 m straight-edge placed level in any direction (avoid abrupt changes of level), max.	10	6	3
Ceilings: level of finished surface			
PD in level of any point on a ceiling from the designed level	± 20	± 15	± 10
PD in level between any two points 6 m apart, max.	15	10	5
PD at any point above a 3 m straight-edge placed level in any direction, max.	10	6	3

WATERPROOFING TO BALCONIES NOTES:

Cementitious waterproofing membrane under tiles to be applied as per manufacturer's specifications.
Cementitious waterproofing membrane to exposed horizontal surfaces to be applied as per manufacturer's specifications before painting is done.
Applicable standards are SANS 10021 Waterproofing of Buildings (including damp-proofing and vapour barrier installation) SANS 952 Polyolefin film for damp- and waterproofing in buildings, including appendix C Notes on use, installation and protection of film (supplement to SANS 10021). Use 0,375 mm black embossed polyolefin damp proof course complying with SANS 952, type B. Lay damp-proof course in unjointed lengths where possible and with full corner laps over full width of wall, level with the top of floors and not less than 150 mm above finished ground level, and under copings and in parapet walls as shown. Gundle Brickgrip DPC 375 damp proof course in walls to SABS mark 952-1985 type B laid with minimum 150mm overlaps. Damp Proofing to be done at all level changes in surface bed.

FLASHING NOTES:

Prepare and apply ABE 06 similar approved super layzryl acrylic and rubberised bitumen waterproofing flashing system including ABE membrane and ABE 4 metal primer where necessary.
All in accordance with the manufacturer's instructions. Flashing & waterproofing to be installed where a roof abuts against a wall or around any projection through a roof covering.

FLASHING & WATERPROOFING TO BE INSTALLED WHERE A ROOF ABUTS AGAINST A WALL OR AROUND ANY PROJECTION THROUGH A ROOF COVERING, BY SPECIALIST

TABLE 2 - DEVIATIONS IN SETTING OUT

1	2	3
Measurement and instrument	Deviation	Comments
Linear dimensions		
30 m carbon steel tape ...	± 5 mm up to and including 30 m and over 30 m pro rata up to a max. of ± 10 mm	With sag eliminated and slope correction applied and extremes of temperature avoided.
Electronic distance-measuring equipment	± 5 mm (plus 1 mm in 200 m)	
Angular measurements		
Optical square	± 15' (± 65 mm in 15 m)	Not suitable for accurate setting out of structural work.
30 m carbon steel tape ...	± 4' (± 20 mm in 15 m)	Normally used for right angles only. With sag eliminated and slope correction applied.
Tripod-mounted optical square	± 1' (± 10 mm in 30 m)	-
Vernier theodolite calibrated to 20"	± 40" (± 10 mm in 50 m)	Mean of two sights, one on each face.
Optical micrometer theodolite (with optical plummet) calibrated to 20"	± 20" (± 5 mm in 50 m)	Scale readings estimated to nearest 5". Mean of two sights, one on each face.
Optical micrometer theodolite calibrated to 1"	± 5" (± 2 mm in 80 m)	Mean of two sights, one on each face.
Verticality		-
Spirit-level	± 10 mm in 5 m	-
Plumb-bob (3 kg)	± 5 mm in 5 m	If used in still conditions.
Theodolite (with optical plummet) and diagonal eye-piece	± 5 mm in 50 m	-
Optical plumbing device ..	± 5 mm in 100 m	This is a special automatic instrument.
Laser	± 5 mm in 100 m	
Levels		-
Spirit-level	± 5 mm in 5 m	-
Water-level	± 5 mm in 15 m	Suitable for short sights. Setting out ..... Not suitable where vision is present (eg. tall buildings).
Optical level	± 5 mm with single sight of up to 60 m	
Automatic level	± 5 mm with single sight of up to 60 m	
Precise level	± 2 mm with single sight	-
Laser	± 3 mm up to 60 m and ± 5 mm up to 150 m	-

DEPARTMENT OF PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2017 -01- 23
APPROVED
ON BEHALF OF CHIEF OFFICER
REG No. 2016/17 P.O. BOX 58603 KEMPTON PARK 1620 TEL 011 975 7570 FAX 011 975 5570

PLANS ADMISSIBLE
C.K. Ackermann

Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 7665365
Cell 0825777337
Reg. No. ST0003

TABLE 13 - PERMISSIBLE DEVIATIONS IN TIMBER COMPONENTS

1	2	3	4
Description	PD, mm		
	Grade		
	III	II	I
Position			
On plan	± 15	± 10	± 5
In elevation	± 15	± 10	± 5
In level in any 6 m	± 15	± 10	± 5
In verticality in any 3 m	± 15	± 10	± 5
Straightness in each 8 m (not cumulative), max.	10	5	2
Length			
Up to and including 2 m	± 6	± 4	± 2
Over 2 m, up to and including 4 m	± 10	± 5	± 3
Over 4 m, up to and including 8 m	± 15	± 10	± 5
Over 8 m, up to and including 12 m	± 20	± 15	± 10
Over 12 m, up to and including 16 m	± 25	± 20	± 10
Over 16 m	± 35	± 25	± 15
Height			
Up to and including 3 m	± 10	± 5	± 2
Over 3 m, up to and including 5 m	± 15	± 10	± 5
Over 5 m, up to and including 7 m	± 20	± 15	± 8
Over 7 m, up to and including 10 m	± 30	± 20	± 10
Thickness (thicknessed timber being used) Not exceeding 300 mm	± 4	± 2	± 1

TABLE 14 - PERMISSIBLE DEVIATIONS IN TIMBER ROOF TRUSSES

1	2	3
Description	PD, mm	
	Grade	
	II	I
Span	± 15	± 10
Height		
Individual trusses	± 25	± 20
Maximum difference between similar trusses in a building	15	10
Size of member (cross-section)	± 2	± 1
(measured in the centre line of span), max.	50	25
Joint position (design size)	± 10	± 5

PLANS ADMISSIBLE
ESTATE
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
Director Signature
Director Signature
28/6/2016
Date

HANDRAILS BUILT IN
Where handrails are built in , expansion joints must be built in around steel sections and filled with silicone on the outside to avoid the appearance of cracks and water penetration.
HANDRAIL NOTES TO STAIRS
Handrail must be 1000mm measured vertically from the pitch line with verticals of max. 100mm clear space apart. Staircase design to eng. spec. at least one handrail per flight must be provided.
HANDRAIL NOTES TO BALCONIES
Handrail must be 1000mm measured vertically with verticals of max 100mm clear space apart.

NOTES APPLICABLE TO ALL SECTIONS & ELEVATIONS

WATERPROOFING NOTES TO TRAFFIC BEARING BALCONIES:

One layer Derbigum CG3 and one layer Derbigum CG4 waterproofing membrane, with 75mm side laps and 100mm end laps, sealed together and to primed surfaces to falls and cross falls by 'torch-fusion', followed by one layer 250 micron plastic sheeting with 50mm laps, loose laid on waterproofing as isolation/protection layer, to receive fully bonded tiles/ paving on a mortar bed with minimum thickness of 45mm. (elsewhere specified). Waterproofing to be installed by an Approved Derbigum Contractor.

STAIR NOTES:

ALL STAIRS TO ENG. SPEC. AND TO COMPLY TO PART M OF SABS 0400. HEADROOM = MIN. 2100MM FROM PITCH TO UNDERSIDE OF CEILING. RISERS SHOULD NOT BE MORE THAN 170MM TREADS SHOULD NOT BE LESS THAN 300MM. THE MINIMUM WIDTH OF A STEP SHOULD BE 1100MM. NO STRAIGHT FLIGHT OF STAIRS SHALL HAVE A VERTICAL RISE OF MORE THAN 3M BETWEEN LANDINGS. NO TREAD SHALL OVERLAP THE NEXT LOWER STEP BY LESS THAN 25MM. NO MORE THAN 3 WINDERS ALLOWED PER FLIGHT OF STAIRS AND NOT ALLOWED TO TURN MORE THAN 90°. HANDRAIL MUST BE 1000MM MEASURED VERTICALLY FROM THE PITCH LINE WITH VERTICALS OF MAX. 100MMC/C APART.

STAIRCASE DESIGN TO ENG. SPEC.

ROOF CONSTRUCTION NOTES:

CONCRETE TUSCAN STYLE ROOF TILES AS PER HOA REQUIREMENTS ON:

250microns (0,25mm) APPROVED UNDERLAY FIXED TO 38x38mm S.A.PINE BATTENS @ max 330mm Ctrs. SECURED TO 152x50mm S.A.PINE TRUSSES @ max. 760mm Ctrs. Min. GRADE 8 TIMBER.
TRUSSES TO HAVE 152x50mm TIE BEAMS, RAFTERS & STRUTS SECURED ONTO 114X38mm WALL PLATE AND TIED DOWN INTO BRICKS TO A min. DEPTH OF 300mm WITH GALVANISED STEEL STRAPS
(30X1.6mm OR 4mm dia. GALVANISED STEEL WIRE)

ROOF PITCH - 23deg WITH TREATED EXPOSED TIMBER SPROCKETS

ROOF DESIGN TO BE APPROVED/DESIGNED BY ENGINEER

6.4mm Thk GYPSUM CEILING BOARDS TO BE FIXED AGAINST 38x38mm S.A.PINE BRANDERING @ SUITABLE Ctrs.

CEILING INSULATION - SEE SANS CALCULATIONS

ROOF OVERHANG = 600mm
NO GUTTERS & RWDP REQUIRED - 1m PAVED APRON AROUND BUILDING

PERIMETER INSULATION:
(SANS204-2011 4.3.2 FLOORS)

BUILDINGS WITH A FLOOR AREA OF LESS THAN 500m2 WITH A CONCRETE SLAB ON THE GROUND SHALL HAVE INSULATION INSTALLED AROUND THE VERTICAL EDGE OF THE PERIMETER:

a) have an R-value of not less than 1.0
b) resist water absorption in order to retain its internal insulation properties &
c) be continuous from the adjacent finished ground level
i) is a depth of not less than 300mm or
ii) for the full depth of the vertical edge of the concrete slab on the ground

NOTE: CARE SHOULD BE TAKEN TO ENSURE THAT ANY REQUIRED TERMITE TREATMENT WILL NOT BE COMPROMISED BY THE SLAB EDGE INSULATION.

EXTRUDED POLYSTYRENE - ISOBOARD ON EXPANDED POLYSTYRENE IS RECOMMENDED OR ANY OTHER SIMILAR INSULATION WITH AN R-VALUE OF 1.0

TABLE 4 — PERMISSIBLE DEVIATIONS IN ELEMENTS OR COMPONENTS ABOVE FOUNDATIONS
(Including floor slabs and excluding items in Tables 6-9)

NOTE: Power floated floor slab is regarded as a floor finish (see table 15). Amdt 1, June 1994

1	2	3	4
Description	PD, mm		
	Grade		
	III	II	I
Position on plan of any edge or surface measured from the nearest grid line or agreed centre-line	± 25	± 15	± 5
Linear (other than cross-section) dimensions	± 30	± 20	± 10
Cross-section dimensions	-10 +20	-5 +15	± 5
Level (deviation from designed level with reference to the nearest transferred datum (TD) of the upper or lower surface, as may be specified, of any slab or other element or component)	-20 +10	-15 +5	-10 +0
Verticality, per metre of height, subject to a maximum of	5 70	5 50	2 30
Out of squareness of a corner or of an opening of an element such as a column for short side of length a) up to and including 0,5 m	± 10	± 5	± 3
b) over 0,5 m and up to and including 2 m	± 20	± 15	± 10
c) over 2 m and up to and including 4 m	± 25	± 20	± 15
Exposed concrete surface a) Flatness of plane surface	10	5	3
b) Abrupt changes in a continuous surface	10	5	2
Exposed concrete surface to be plastered a) Flatness of plane surface	15	10	*
b) Abrupt changes in a continuous surface	10	5	*

*Tolerances not stated and those for bow, camber and twist, and for slip form concrete and pre-cut concrete will be stated in the project specification, where applicable.

TABLE 6 - PERMISSIBLE DEVIATIONS IN STRUCTURAL AND UNFINISHED CONCRETE STAIRS
(Excluding complete pre-finished precast flights)
(see Table 16)

1	2	3	4
Description	PD, mm		
	Grade		
	III	II	I
Position on plan PD on plan of any point in relation to the nearest reference point at the same level, the distance between the two points being not more than 15 m	± 20	± 15	± 10
Length Length on plan of clear span (excluding landings)	± 20	± 15	± 10
Width of flight	± 15	± 10	± 5
Height Vertical height measured between either top surfaces or soffit surfaces of any flight of stairs	± 20	± 15	± 10
Waist thickness Thickness of waist measured at right angles to the slope of the flight	± 15	± 10	± 5
Difference in the rise of two consecutive steps, max.	10	5	5
Difference in width of tread (going) of consecutive steps, max.	15	10	5
Difference in level of tread, max.	8	5	3
With the going across width of the stairs per 1 m width measured between the extremities of treads	10	5	5
Other widths pro rata with maximum of	15	10	5

REVISIONS

REV	DESCRIPTION	DATE

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2
(NOT INCLUDED IN TOTALS)

ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

P. L. BADENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001

danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 366 1485
FAX 086 529 3632
E-MAIL: danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT SACAP 3594

PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 STRUBENS RIDGE ESTATE Roodepoort.

DRAWING NAME:	SECT
	SECTION A-A, SECTION B-B, SANS 10155
PROJECT STATUS	COUNCIL SUBMISSION
DRAWN BY: SDN	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT	28 SEP 2016
DATE PUBLISHED	
DRAWING NUMBER	REVISION NUMBER
706/03	

Adobe VA DOCS\SITE FILES\SITE FILES\706\CONSTRUCTION\WORKING\706 SECT.pln

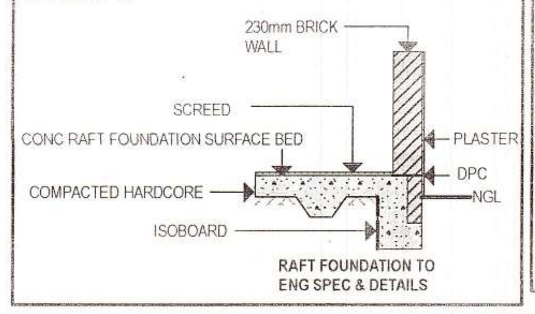
PERIMETER INSULATION:
(SANS204-2011 4.3.2 FLOORS)

BUILDINGS WITH A FLOOR AREA OF LESS THAN 500m² WITH A CONCRETE SLAB ON THE GROUND SHALL HAVE INSULATION INSTALLED AROUND THE VERTICAL EDGE OF THE PERIMETER:

a) have an R-value of not less than 1.0
b) resist water absorption in order to retain its internal insulation properties &
c) be continuous from the adjacent finished ground level
   i) is a depth of not less than 300mm or
   ii) for the full depth of the vertical edge of the concrete slab on the ground

NOTE: CARE SHOULD BE TAKEN TO ENSURE THAT ANY REQUIRED TERMITE TREATMENT WILL NOT BE COMPROMISED BY THE SLAB EDGE INSULATION.

EXTRUDED POLYSTYRENE - ISOBOARD ON EXPANDED POLYSTYRENE IS RECOMMENDED OR ANY OTHER SIMILAR INSULATION WITH AN R-VALUE OF 1.0



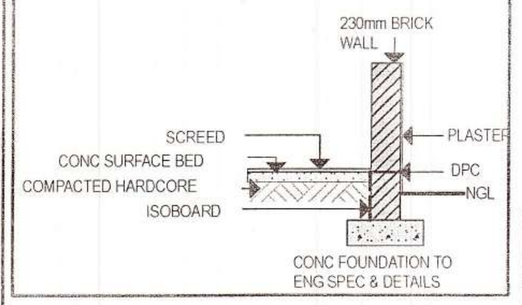
PERIMETER INSULATION:
(SANS204-2011 4.3.2 FLOORS)

BUILDINGS WITH A FLOOR AREA OF LESS THAN 500m² WITH A CONCRETE SLAB ON THE GROUND SHALL HAVE INSULATION INSTALLED AROUND THE VERTICAL EDGE OF THE PERIMETER:

a) have an R-value of not less than 1.0
b) resist water absorption in order to retain its internal insulation properties &
c) be continuous from the adjacent finished ground level
   i) is a depth of not less than 300mm or
   ii) for the full depth of the vertical edge of the concrete slab on the ground

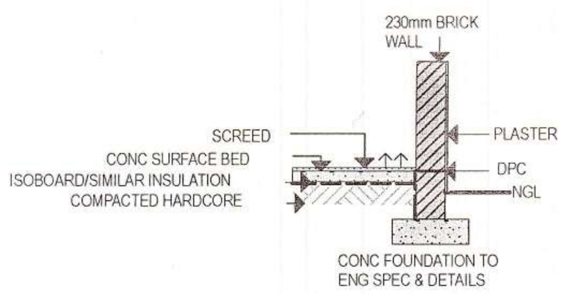
NOTE: CARE SHOULD BE TAKEN TO ENSURE THAT ANY REQUIRED TERMITE TREATMENT WILL NOT BE COMPROMISED BY THE SLAB EDGE INSULATION.

EXTRUDED POLYSTYRENE - ISOBOARD ON EXPANDED POLYSTYRENE IS RECOMMENDED OR ANY OTHER SIMILAR INSULATION WITH AN R-VALUE OF 1.0



UNDER FLOOR INSULATION:
(SANS204-20100 4.3.2 FLOORS)

WHERE UNDERFLOOR (IN SCREED, UNDER FLOOR HEATING, UNDER LAMINATE HEATING, UNDER CARPET HEATING, UNDER TILE HEATING, CUT IN UNDER FLOOR HEATING OR WATERBASED UNDER FLOOR HEATING) HEATING SYSTEM IS INSTALLED, THE HEATER SHALL BE INSULATED UNDERNEATH THE SLAB WITH INSULATION THAT HAS A MIN. R-VALUE OF NOT LESS THAN 1.0



ROOF ASSEMBLY CALCULATIONS:
(FOR CONCRETE ROOF SLABS)

REQUIRED MINIMUM R-VALUE FOR ROOF ASSEMBLIES AS PER SANS 204:2011 4.3.6 - 3.7
CLIMATIC ZONE - 1
DIRECTION OF HEAT FLOW - UP

CALCULATION

NOTES	CLIMATIC ZONE	TOTAL R-VALUE	DIRECTION
- OUTDOOR AIR FILM	1	0.03	UP
- STONE CHIP	1	0.02	UP
- BIDIM WATER PERMEABLE FILTER FABRIC	1	0.01	UP
- 40mm LAMBDA BOARD HIGH DENSITY 35kg/m2 CLOSE CELL GRADE B INSULATION	1	1.67	UP
- 40mm LAMBDA BOARD HIGH DENSITY 35kg/m2 CLOSE CELL GRADE B INSULATION	1	1.67	UP
- DERBIGUM PAINTED SILVER	1	0.04	UP
- SCREED	1	0.01	UP
- SOLID CONCRETE	1	0.12	UP
- INDOOR AIR FILM	1	0.11	UP
TOTAL	1	3.7	UP

THE DESIGN COMPLIES WITH SANS10400-XA-2011 SHOULD THE ABOVE CONDITIONS BE ADHERED TO

EXTERNAL WALL CALCULATION WITH STONE CLADDING:

REQUIRED MINIMUM THERMAL RESISTANCE - 0.35
CLIMATIC ZONE - 1

CALCULATION

	CONDUCTIVITY(W/m.K)	THICKNESS(mm)	RESISTANCE(mK/W)
NATURAL STONE	0.70	115	0.16
BRICKWORK	0.82	115	0.14
BRICKWORK	0.82	115	0.14
INTERNAL PLASTER	0.26	15	0.05
TOTAL		260	**0.49**

THE DESIGN COMPLIES WITH THE MINIMUM REQUIREMENTS AS PER SANS 10400-XA-2011 FOR EXTERNAL WALLS

EXTERNAL WALL CALCULATION WITH STONE CLADDING:

REQUIRED MINIMUM THERMAL RESISTANCE - 0.35
CLIMATIC ZONE - 1

CALCULATION

	CONDUCTIVITY(W/m.K)	THICKNESS(m)	RESISTANCE(mK/W)
NATURAL STONE	0.7	115	0.15
BRICKWORK	0.7	230	0.32
INTERNAL PLASTER	0.6	15	0.03
TOTAL		360	**0.50**

THE DESIGN COMPLIES WITH THE MINIMUM REQUIREMENTS AS PER SANS 10400-XA-2011 FOR EXTERNAL WALLS

EXTERNAL WALL CALCULATION WITHOUT STONE CLADDING:

REQUIRED MINIMUM THERMAL RESISTANCE - 0.35
CLIMATIC ZONE - 1

CALCULATION

	CONDUCTIVITY(W/m.K)	THICKNESS(mm)	RESISTANCE(mK/W)
EXTERNAL PLASTER	0.26	15	0.05
BRICKWORK	0.82	115	0.14
BRICKWORK	0.82	115	0.14
INTERNAL PLASTER	0.26	15	0.05
TOTAL		260	**0.38**

THE DESIGN COMPLIES WITH THE MINIMUM REQUIREMENTS AS PER SANS 10400-XA-2011 FOR EXTERNAL WALLS

BUILDING ORIENTATION:

ZONE	-	1
PREFERRED	-	TRUE NORTH - +15⁰
ACTUAL ORIENTATION	-	TRUE NORTH

ROOF ASSEMBLY CALCULATIONS:
(FOR CONCRETE ROOF TILES/CORRUGATED IRON ROOF SHEETS/OTHER)

REQUIRED MINIMUM R-VALUE FOR ROOF ASSEMBLIES AS PER SANS 204:2011 4.3.6 - 3.7
CLIMATIC ZONE - 1
DIRECTION OF HEAT FLOW - UP

CALCULATION

NOTES	CLIMATIC ZONE	TOTAL R-VALUE	DIRECTION
- CO-EFFICIENT - OUTSIDE THERMAL CONDUCTIVITY	1	0.05	ALL DIRECTIONS
- CO-EFFICIENT - INSIDE THERMAL CONDUCTIVITY	1	0.14	DOWN
- 20MM THICK CLAY TILE	1	0.02	
- GYPSUM PLASTER BOARD	1	0.07	
- THERMAL CEILING INSULATION	1	3.40	
TOTAL R-VALUE ACHIEVED	1	**3.68**	UP
ROUNDED UP	1	3.7	UP

CELLULOSE FIBRE LOOSE FILL CEILING INSULATION/POLYESTER FIBRE BLANKET WITH A MINIMUM THICKNESS OF 135mm HAS BEEN SUGGESTED IN ORDER TO COMPLY WITH THE ABOVE TOTAL R-VALUE ANY OTHER THERMAL INSULATION MAY BE UTILISED ON CONDITION THAT IT COMPLIES WITH THE MIN R-VALUE AS CALCULATED ABOVE

THE DESIGN COMPLIES WITH SANS10400-XA-2011 SHOULD THE ABOVE CONDITIONS BE ADHERED TO

NOTES APPLICABLE TO SANS 10400

1. THE DIMENSIONS OF ANY ROOM OR SPACE TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-C
2. A CHANGE IN LEVEL, THE DESIGN OF RAMPS AND DRIVEWAYS, OR ACCESS TO SWIMMING POOLS AND SWIMMING BATHS TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-D
3. THE PROVISION OF SANITARY FACILITIES TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-F
4. COMPETENT PERSONS (GEOTECHNICAL) IN RESPECT OF GEOTECHNICAL SOLUTIONS OR SOIL IMPROVEMENTS TO BE APPOINTED WHERE REQUIRED
5. FLOORS IN ANY LAUNDRY, KITCHEN, SHOWER ROOM, BATHROOM OR ROOM CONTAINING A TOILET PAN OR URINAL TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-J
6. THE STRUCTURAL STRENGTH AND STABILITY OF A WALL TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-K
7. THE ROOF FIXING TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-K
8. THE WATER PENETRATION THROUGH A WALL TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-K
9. ROOF COVERINGS AND WATERPROOFING SYSTEMS TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-L
10. FLAT ROOFS OR RELATED GUTTERS TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-L
11. THE ROOF ASSEMBLY AND ANY CEILING ASSEMBLY, IN ADDITION TO COMPLYING WITH THE REQUIREMENTS OF SANS 10400-C, TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-L AND THE ROOF ASSEMBLY TO BE SUPPORTED ON WALLS THAT COMPLY WITH THE REQUIREMENTS OF SANS 10400-K
12. GUTTERS AND DOWNPIPES, IF ANY, TO BE SIZED IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-R
13. THE FIRE RESISTANCE AND COMBUSTABILITY OF THE ROOF ASSEMBLY OR ANY CEILING ASSEMBLY TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-L
14. STAIRWAYS TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-M
15. WALLS, SCREENS, RAILINGS OR BALUSTRADES TO SUCH STAIRWAY TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-K AND SANS 10400-T
16. THE TYPE AND FIXING OF GLAZING TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-N
17. THE SELECTION OF THE GLAZING TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-N
18. THE LIGHTING IN A HABITABLE ROOM, BATHROOM, SHOWER ROOM AND ROOM CONTAINING A TOILET PAN TO COMPLY WITH THE DETAILED REQUIREMENTS OF SANS 10400-T AND THE DETAILED REQUIREMENTS OF SANS 10400-O
19. THE VENTILATION TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF SANS 10400-T AND TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-O
20. THE DESIGN OF THE DRAINAGE SYSTEM TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-P
21. THE MEANS FOR PROVIDING FACILITIES FOR PERSONS WITH DISABILITIES TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-S
22. THE PROVISION OF SPACE HEATING TO BE IN ACCORDANCE WITH THE DETAILED REQUIREMENTS OF SANS 10400-V
23. ANY EXHAUST FAN MAY NOT BE CONNECTED TO A LIGHT SWITCH & MAY NOT DUMP INTO THE CEILING/DUCT. DESIGN MUST BE ENGINEERS SPEC & DETAIL.
24. WINDOWS WITHIN A RADIUS OF 1.8m OF A BATH/SHOWER MUST BE INSTALLED WITH SAFETY GLAZING

GLAZING

smart-XA

GLAZING <> 15% CALCULATION (PRESCRIPTIVE ROUTE)

Storey: GROUND
Nett Floor Area: 144.87 sq.m.
Glazed Area: 26.66 sq.m.
Percentage: 18 %
Does Not Comply

MAX AGGREGATES (PRESCRIPTIVE ROUTE)

Climatic Zone: Climatic Zone 1
Storey: GROUND
Nett Floor Area: 144.87 sq.m.
MAX (Cu): 173.844
Total (Cu): 152.73 — Does Comply
MAX (Cshgc): 21.7305
Total (Cshgc): 7.04 — Does Comply

GLAZING <> 15% CALCULATION (PRESCRIPTIVE ROUTE)

Storey: FIRST
Nett Floor Area: 129.63 sq.m.
Glazed Area: 32.82 sq.m.
Percentage: 25 %
Does Not Comply

MAX AGGREGATES (PRESCRIPTIVE ROUTE)

Climatic Zone: Climatic Zone 1
Storey: FIRST
Nett Floor Area: 129.63 sq.m.
MAX (Cu): 155.556
Total (Cu): 152.8 — Does Comply
MAX (Cshgc): 19.4445
Total (Cshgc): 8.84 — Does Comply

FENESTRATION CALCULATIONS:

ZONE: 1

GROUND FLOOR NETT GLAZING = 26.66m² / GROUND FLOOR AREA = 144.87m²
NETT GLAZED AREA TO FLOOR AREA RATIO = 18%

FIRST FLOOR NETT GLAZING = 32.82m²/ FIRST FLOOR AREA = 129.63m²
NETT GLAZED AREA TO FLOOR AREA RATIO = 25%

AFTER FENESTRATION

MAX GF AGGREGATE CONDUCTANCE ALLOWED - 173.844
ACTUAL GF AGGREGATE CONDUCTANCE - 152.73

MAX FF AGGREGATE CONDUCTANCE ALLOWED - 155.556
ACTUAL FF AGGREGATE CONDUCTANCE - 152.8

MAX GF AGGREGATE SHGC ALLOWED - 21.7305
ACTUAL GF AGGREGATE SHGC - 7.04

MAX FF AGGREGATE SHGC ALLOWED - 19.4445
ACTUAL FF AGGREGATE SHGC - 8.84

THE DESIGN COMPLIES WITH SANS 10400-XA:2011 - GLAZING FENESTRATION CALCULATIONS

ESTIMATED ENERGY CONSUMPTION:

(SEE LIGHTING SCHEDULE FOR TOTALS)

TOTAL AREA OF HOUSE IN SQM	-	355.65 sqm
TOTAL ELECTRICITY USED	-	823 watts
AMOUNT (WATTS/SQM)	-	2.31 watts/sqm
ACTUAL ENERGY CONSUMPTION BASED ON MAX ENERGY	-	1497.86 kWh/annum 1820 hours/annum
CONSUMPTION ALLOWED (AS PER SANS 10142)	-	1778.25 kWh/annum
ACTUAL ENERGY CONSUMPTION	-	COMPLY

THE DESIGN **COMPLIES** WITH THE REQUIREMENTS AS PER SANS 10400-XA:2011 FOR ENERGY CONSUMPTION

LIGHTING CALCULATIONS

LIGHTING CALCULATIONS		3	2 = E2 - HOSPITAL	
ENERGY DEMAND			3 = H3 - DOMESTIC RESIDENCE	
	TOTAL		4 = H4 - DWELLING HOUSE	
ALLOWED 5W/SQM	AREA IN SQM	TOTAL WATTS		
5	355.65	1778.25		
SEE LIGHTING SCHEDULE				
TOTAL WATTS USED		823	EQUALS	2.31 W/SQM
				COMPLY
ENERGY CONSUMPTION				
ALLOWED	5	kWh/sqm.annually or 5kWh/sqm		
TOTAL AREA IN SQM	355.65			
TOTAL	1778.25	kWh.annum		
ASSUME LIGHTS ARE ON FROM 17:00-22:00 EACH DAY/YEAR = 5 HOURS PER DAY				
WEEKS	52			
DAYS	7			
HOURS/DAY	5			
TOTAL	1820	HOURS/ANNUM		
TOTAL LAMPS	0.823	kW		
HOURS/ANNUM	1820			
TOTAL USAGE	1497.86	kWh.annum	COMPLY	

LIGHTING SCHEDULE

LIGHT	TYPE	SYMBOL	QUANTITY	WATT PER LAMP	TOTAL WATT	GRAND TOTAL
CEILING LF	LED	⌖	81	9	729	
FLUORESCENT LF	CFL	▭	1	13	13	
WALL LF	LED	⊗	9	9	81	823
			91			

Volumes/WIP/GEORGE BELL STRUBEN RIDGE/B CONSTRUCTION DWGS/GEORGE BELL WD1.pln

SANS 204:2011
Edition 1

4.5.2 Hot water services

4.5.2.1 A minimum of 50 % by volume of the annual average hot water heating requirement shall be provided by means other than electrical resistance heating, including, but not limited to, solar heating, heat pumps, heat recovery from other systems or processes.

4.5.2.2 The solar water heating systems shall comply with SANS 1307 and SANS 10106, based on the thermal performance determined in accordance with the provisions of SANS 6211-1 and SANS 6211-2. The installation thereof shall comply with SANS 10254.

4.5.2.3 Hot water usage should be minimized and the system maintained in accordance with the requirements given in SANS 10252-1.

4.5.2.4 All exposed pipes to and from the hot water cylinders and central heating systems shall be insulated with pipe insulation material with an *R*-value in accordance with table 13.

4.5.2.5 Insulation shall

a) be protected against the effects of weather and sunlight,

b) be able to withstand the temperatures within the piping, and

c) achieve the minimum total *R*-value given in table 13.

Table 13 — Minimum *R*-value of pipe insulation

1	2
Internal diameter of pipe	Minimum *R*-value[a]
≤ 80 mm > 80 mm	1,00 1,50
[a] Determined with a hot surface temperature of 60 °C and an ambient temperature of 15 °C.	

4.5.2.6 Hot water vessels and tanks shall be insulated with a material achieving a minimum *R*-value of 2,0.

NOTE To achieve this value, insulation in addition to the manufacturers' installed insulation may be required.

4.5.2.7 Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.

4.5.2.8 The piping insulation requirements do not apply to space heating water piping

a) located within the space being heated where the piping is to provide the heating to that space, or

b) encased within a concrete floor slab or in masonry.

These pipes shall comply with SANS 10252-1.

4.5.2.9 Piping to be insulated includes all flow and return piping, cold water supply piping within 1 m of the connection to the heating or cooling system and pressure relief piping within 1 m of the connection to the heating or cooling system. Where possible, lengths of pipe runs should be minimized.

HOT WATER SYSTEM

CALCULATIONS AS PER SANS 10252 - 1:2012
HOT WATER SYSTEM TO BE APPROVED BY SPECIALIST

NOTES	DWELLING HOUSE HIGH RENTAL	NOTES
TYPE	115L/CAPITA/DAY (USE 140L/CAPITA/DAY IF TOTAL AREA OF HOUSE > 1000sqm)	
2 PEOPLE PER BEDROOM	7 PEOPLE/DAY (3 BEDROOMS & MAIDS ROOM) (ANY ROOM WITH BATHRM = BEDROOM)	
ASSUMED DAILY HOT WATER	805L	
	CONSUMPTION	
ASSUMED ANNUAL HOT WATER	293825L	
	WATER CONSUMPTION	
50% OF DAILY HOT WATER	403L (805L / 2)	TO BE PROVIDED BY MEANS OTHER THAN ELECTRICAL RESISTANCE
INTERNAL DIAMETER OF WATER SERVICE PIPES	<80mm	
MIN REQUIRED R-VALUE OF PIPE INSULATION	1.0	
MIN REQUIRED R-VALUE OF HOT WATER VESSEL/TANK	2.0	

HOT WATER CALCULATION

CALCULATED AS PER SANS 10252-1:2012

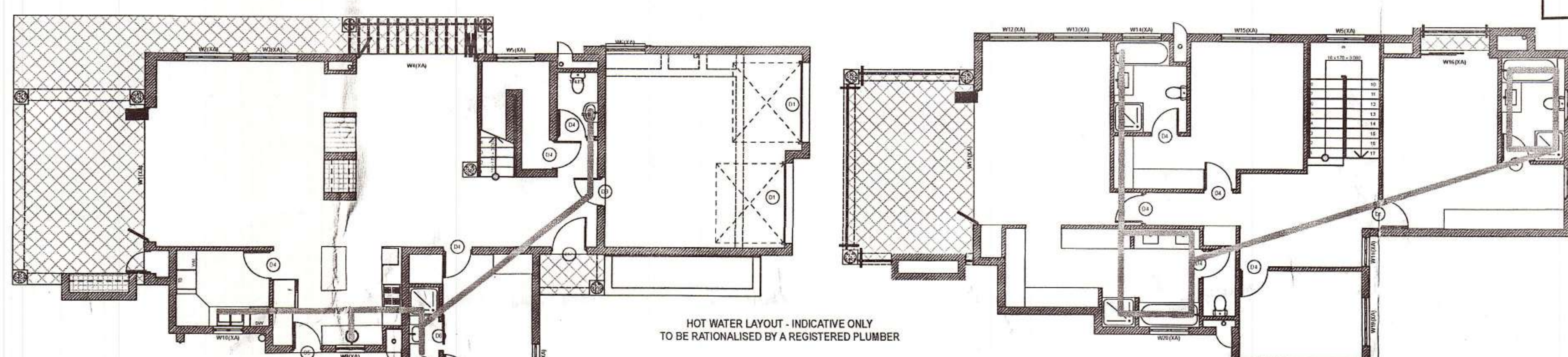
ESTIMATED DAILY DEMAND	- HOT WATER DEMAND	-	805 LITRES
CAPACITY	- STORAGE TANK CAPACITY	-	3 SOLAR GEYSERS @ 250L PER EACH

THE DESIGN COMPLIES WITH SANS 10400-XA-2100 & SANS 10252-1:2012

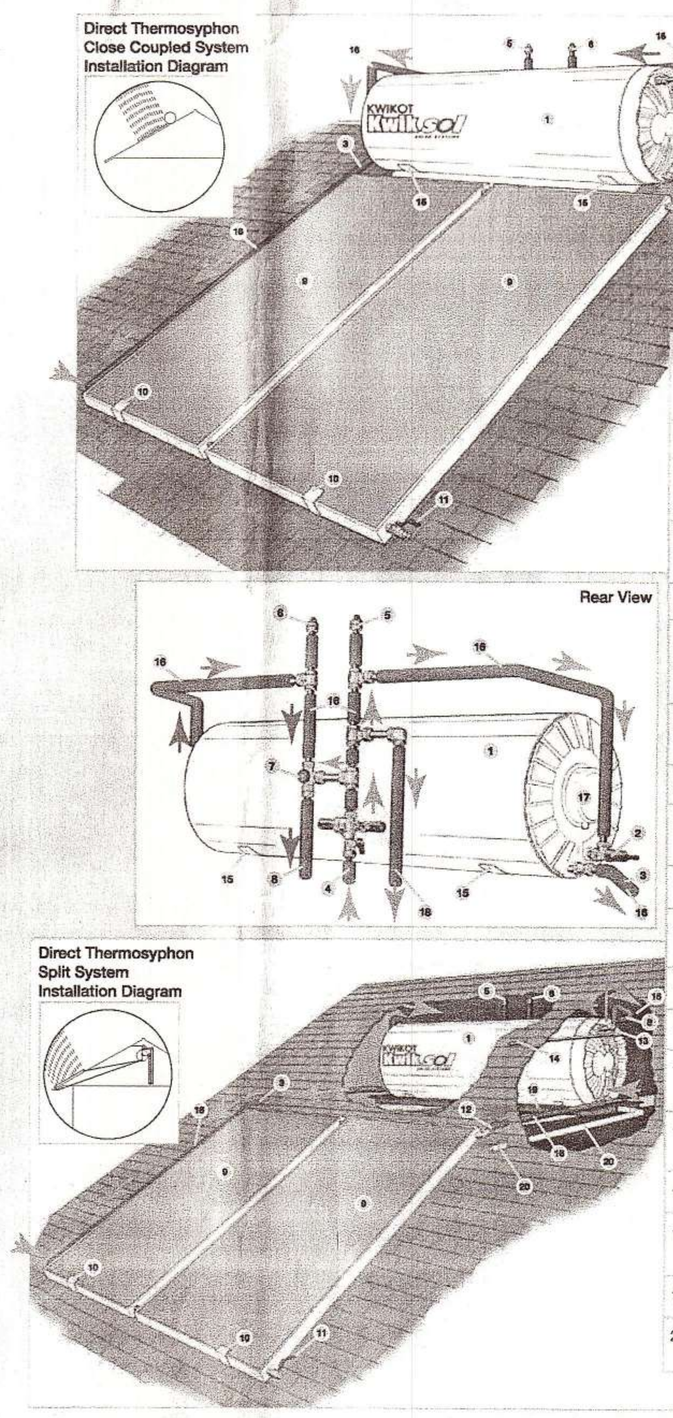
HOT WATER PLAN NOTE

A MIN OF 50% BY VOLUME OF THE ANNUAL AVERAGE HOT WATER HEATING REQUIREMENTS SHAL BE PROVIDED BY MEANS OF OTHER THAN ELECTRICAL RESISTANCE HEATING

ALL HOT WATER PIPES MUST BE INSTALLED WITH THERMAL INSULATION WITH A THERMAL RESISTANCE OF MIN 1



HOT WATER LAYOUT 1:150



	Product Description
1	Solar Water Heater Direct, 400kPa
2	Drain Cock
3	Cold Water Feed to Solar Collector Panels
4	Multi Pressure Control Valve, 400kPa
5	Vacuum Breaker Cold Side
6	Vacuum Breaker Hot Side
7	Thermostatic Mixing Valve
8	Hot Water Feed to Taps (Balanced Pressure)
9	Solar Collector Panels
10	Roof Mounting Brackets for Solar Collector Panel
11	Lever Ball Valve
12	Hot Water Feed to Solar Water Heater
13	Safety Valve, 400kPa
14	Expansion Overflow Pipe
15	Pitch Roof Support for Solar Water Heater
16	Thermal Pipe Lagging (R1 Rating)
17	Electrical Cover Plate
18	Cold Water Feed to Taps (Balanced Pressure)
19	Drip Tray
20	50mm Overflow from Drip Tray

KWIKOT Kwiksol

Solar Water Heaters - Close Coupled & Split - Direct System

direct system

The direct system is used in frost-free locations, where the ambient temperature never falls below 5°C and where the water quality is good (less than 600ppm Total Dissolved Solids/Minerals). The system can be used with Solar Collector Panels or Solar Vacuum Tubes.

The direct system, is where the water to be used in the household (hot water) circulates through the solar collector panels, or solar vacuum tubes manifold, transferring solar energy into the storage tank of the solar water heater.

The direct system can be installed as a Split System (pumped or thermosyphoned circulation methods), where the solar water heater is installed inside the roof or away from the solar collector panels or solar vacuum tubes, or installed as a Close Coupled System (thermosyphon circulation), where the solar water heater is installed outside on the roof and above or higher than the solar collector panels or solar vacuum tubes (see section Circulation Methods).

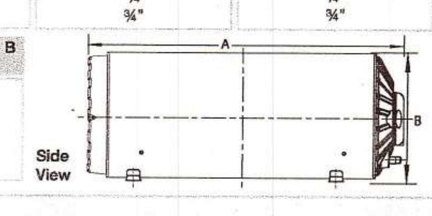
solar water heater product features

- The Kwikot Kwiksol Solar Water Heater Direct System complies with SANS 1307, is SABS 400kPa approved and can be used as a close coupled system or split system.
- The inner cylinder is manufactured from 2mm steel and thermo fused porcelain enamelled for cylinder longevity and hygiene.
- Polyurethane insulation between the inner cylinder and outer casement reduces energy and heat loss.
- 2 x aluminium sacrificial anodes are fitted for corrosion protection.
- The solar water heater is designed for domestic hot water application in conjunction with one or more solar collector panels or solar vacuum tubes.
- The two extra water connections required for connecting solar collector panels or connecting the manifold above the solar vacuum tubes, and the booster element, ensures that the solar water heater can be used as a conventional electric water heater and as a solar water heater.
- The solar water heater thermostat will automatically switch on when the incoming hot water from the solar collector panels or from the manifold above the solar vacuum tubes, has not reached the set temperature setting on the thermostat. This will occur on cloudy days and at night when the water temperature drops in the solar water heater or when hot water is drawn off and cold water enters the solar water heater.

solar water heater product specification data

Capacity (Litres)	Element Rating (Kw)	Operating Pressure (kPa)	Mass Empty (kg)	Water Connections (BSP Male)	Solar Connections (BSP Male)
100	2	Up to 400	27	¾"	¾"
150	2	Up to 400	36	¾"	¾"
200	2	Up to 400	43	¾	¾"
300	3	Up to 400	82	¾"	¾"

Product Code	Capacity (Litres)	Dimension A (mm)	Dimension B (mm)
SOL - 100 - DIR	100	740	538
SOL - 150 - DIR	150	1035	538
SOL - 200 - DIR	200	1325	538
SOL - 300 - DIR	300	1935	538



product installation data

- Where the solar water heater is installed in the roof, it must be installed in compliance with SANS 10106 Solar Water Heater and SANS 10254 Specification complete with a Temperature & Pressure Valve (Safety Valve), Drain Cock (both supplied with the solar water heater), Multi Pressure Control Valve 400kPa, Drip Tray and Kwikot Vacuum Breakers on the cold water supply and hot water supply.
- Geyser feet can be moved from a horizontal angle to a 30° angle.
- If the solar water heater is installed on the roof, careful inspection must be carried out to ensure that the roof can support the weight of the entire installation system once it is filled with water. Care must be taken where the front feet of the solar water heater are located. The feet should be located over a tile batten, purlin or similar for maximum strength.
- If the solar water heater is installed in the roof, the following minimum installation clearance must be allowed for on each side of the solar water heater in order to remove the element or thermostat and the anode/s from the opposite end:
  100lt/150lt – 450mm
  200lt/300lt – 920mm



STRUBENS RIDGE •ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
Charles Beaver — Director — Signature
S.M. [signature] — Director — Signature
28/10/2016 — Date

PLANS ADMISSIBLE
C.K. Ackermann:...
Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 7645365
Cell 0825777387
Reg. No. ST0003

P. L. BADENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001

REVISIONS

REV	DESCRIPTION	DATE

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2
(NOT INCLUDED IN TOTALS)

ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 366 1485
FAX 086 529 3632
E-MAIL: danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT
SACAP 3594

PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 'STRUBENS RIDGE ESTATE' ROODEPOORT.

DRAWING NAME:

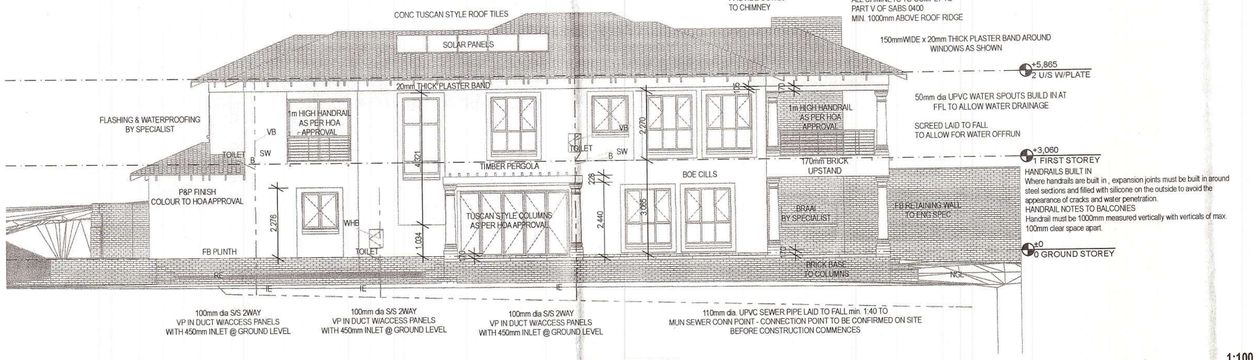
SANS 10400 XA

A SANS0000002A, A SANS0000001A, Kwiksol Solar Water Heaters Direct System for Frost Free Locations (Mar 2014), HOT WATER LAYOUT, LIGHTING SCHEDULE,

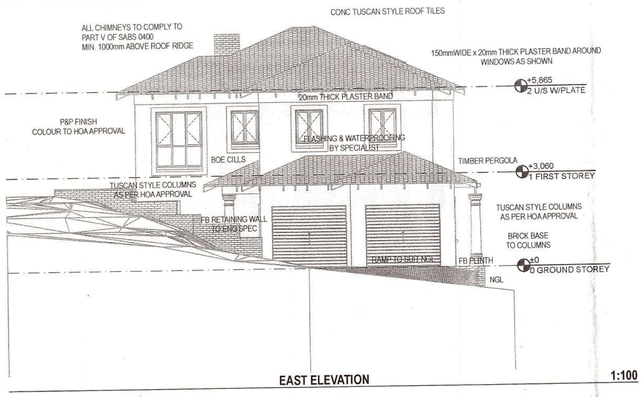
PROJECT STATUS

COUNCIL SUBMISSION

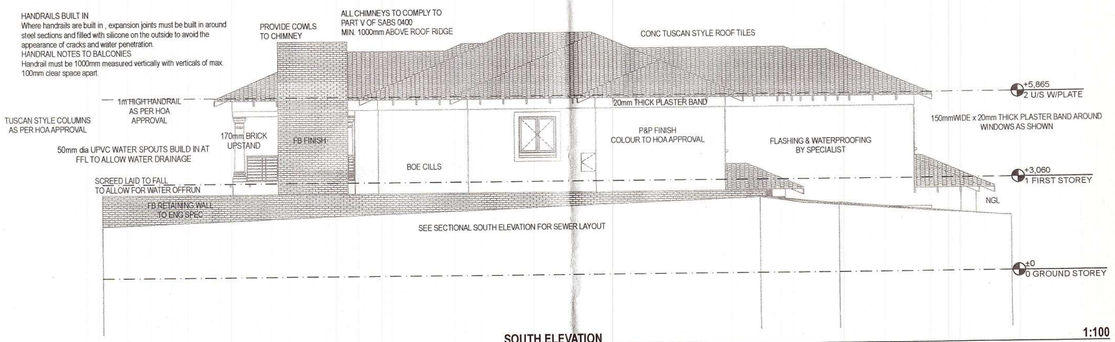
DRAWN BY: JVW	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT DATE PUBLISHED	26 SEP 2016 Tuesday, 18 October 2016
DRAWING NUMBER	REVISION NUMBER
706/06	



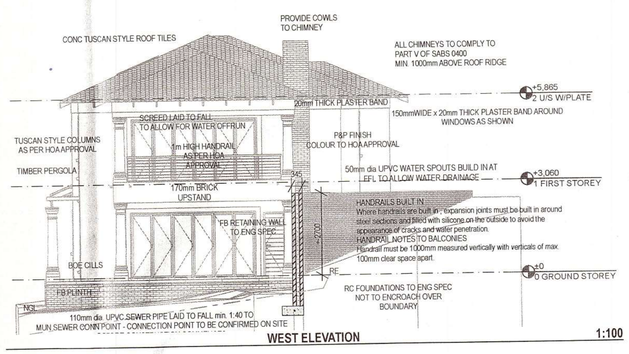
NORTH ELEVATION 1:100



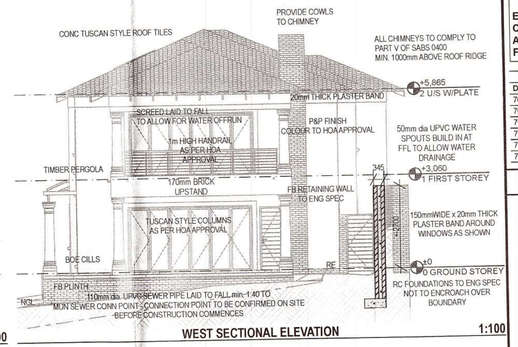
EAST ELEVATION 1:100



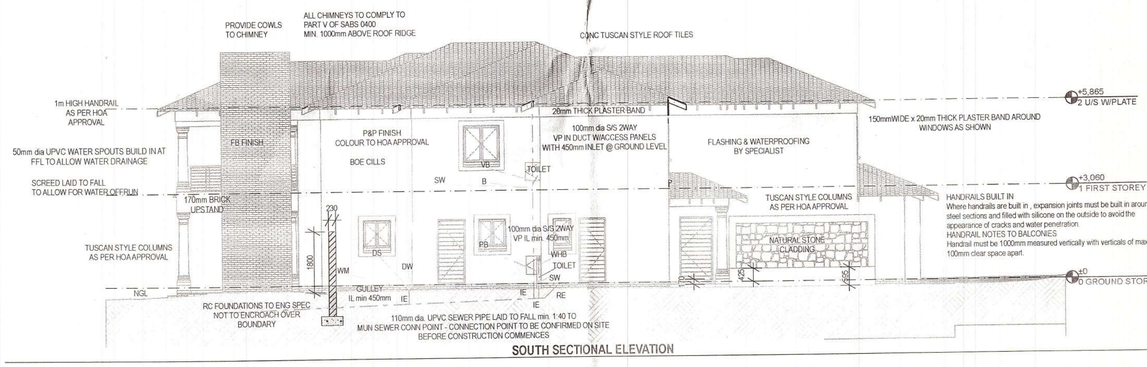
SOUTH ELEVATION 1:100



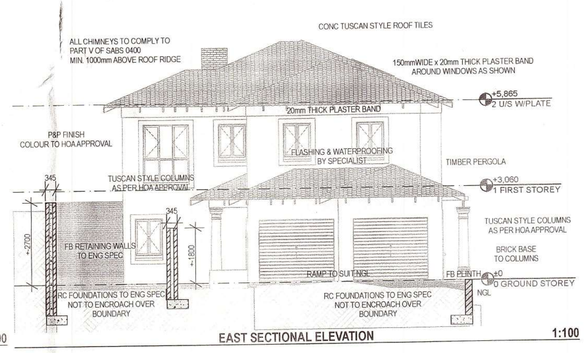
WEST ELEVATION 1:100



WEST SECTIONAL ELEVATION 1:100



SOUTH SECTIONAL ELEVATION 1:100



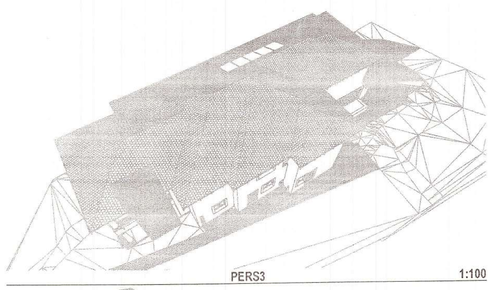
EAST SECTIONAL ELEVATION 1:100

PLANS ADMISSIBLE
C.K. Ackermann

Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 7645365
Cell 0825777357
Reg. No. ST0003

STRUBENS RIDGE • ESTATE •
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
Charles Bezuar — Director — Signature
S.M. Lamprecht — Director — Signature
28/10/2016 — Date

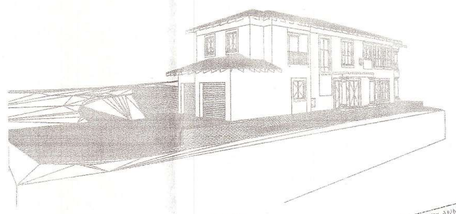
P. L. BADENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001



PERS3 1:100



PERS5 1:100



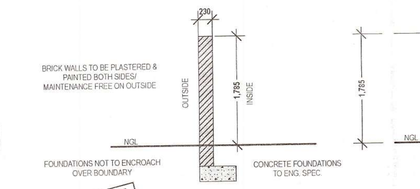
PERS1 1:100



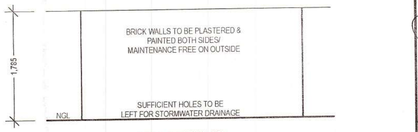
PERS4 1:100



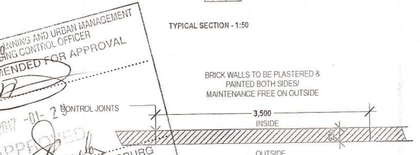
PERS2 1:100



TYPICAL SECTION - 1:50



TYPICAL ELEVATION - 1:50



TYPICAL PLAN - 1:50

DEVELOPMENT PLANNING AND URBAN MANAGEMENT BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2017 -01- 23
CONTROL JOINTS
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2016/12/1552. BCP 570 COJ

BOUNDARY WALL SPECIAL NOTES:
- ALL BRICK BOUNDARY WALLS CONSTRUCTION TO COMPLY TO SANS 10400-K:2011
- NO DPC TO BE INSTALLED IN FREE STANDING WALLS BUT BRICKS WITH HIGH DENSITY AND WATER ABSORPTION OF NOT MORE THAN 7% SHALL BE USED UP TO 150MM ABOVE NGL
- ALL BOUNDARY WALLS TO BE PLASTERED & PAINTED FINISH/MAINTENANCE FREE FINISH ON OUTSIDE
- SUFFICIENT STORM WATER DRAINAGE HOLES TO BE ALLOWED FOR IN WALLS TO ALLOW WATER DRAINAGE
- CONTROL JOINTS TO BE INSTALLED AT MAX EVERY 10m
- NO FOUNDATIONS TO ENCROACH OVER BOUNDARY WALLS INTO NEIGHBOURING PROPERTIES AND/OR COUNCIL PROPERTY/SERVITUDES
- FOR CONTROL JOINTS REFER TO SANS 10400-K 2011 PARAGRAPH 4.2.6

YARD WALL DETAILS 1:50

REVISIONS

REV	DESCRIPTION	DATE

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2
(NOT INCLUDED IN TOTALS)

ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

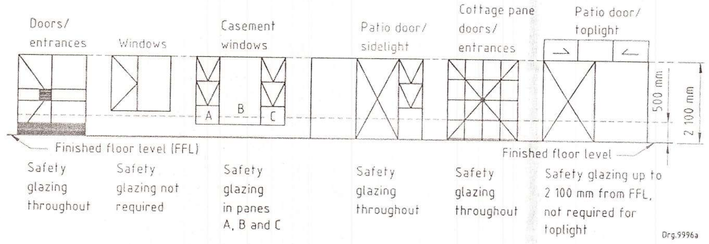
danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 386 1485
FAX 086 529 3632
E-MAIL danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT
SACAP 3594

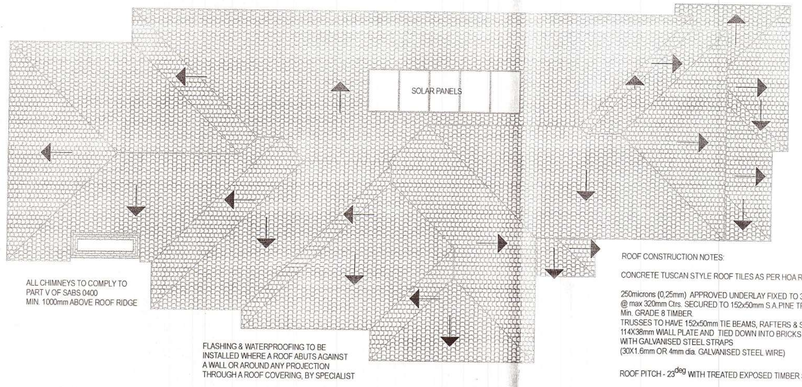
PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 STRUBENS RIDGE ESTATE ROODEPOORT

DRAWING NAME:	ELE/PERSP
NORTH ELEVATION, EAST ELEVATION, SOUTH ELEVATION, WEST ELEVATION, SOUTH SECTIONAL ELEVATION, EAST SECTIONAL ELEVATION, WEST SECTIONAL ELEVATION, PERS1, PERS2, PERS3, PERS4, PERS5, YARD WALL DETAILS	
PROJECT STATUS	COUNCIL SUBMISSION
DRAWN BY: JVW	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT	26 SEP 2016
DATE PUBLISHED	28 Oct 2016
DRAWING NUMBER	REVISION NUMBER
706/04	

G:\Current\JOBS\706 - ALLENS NEK\SHEETS\706 - ELEVATIONS CONSTRUCTION DRAWINGS\706 - ELEVATIONS.dwg

- ALL WINDOW AND DOOR DIMENSIONS TO BE CHECKED AND VERIFIED ON SITE BEFORE MANUFACTURE
- GLAZING TO COMPLY WITH CLAUSE NN2.1 C OF THE NBR AND SANS 0137 AND 126
- GLASS THICKNESS TO MEET REQUIREMENTS OF ALL SAFETY REGULATIONS
- GLAZING VALUES TAKEN FROM
"TABLE 6 - WORST-CASE WHOLE GLAZING ELEMENT PERFORMANCE VALUES" (SANS 204:2011 EDITION 1).
GLAZING WITH SIMILAR OR LOWER SHGC AND U-VALUES MAY ALSO BE USED





ROOF CONSTRUCTION NOTES:

CONCRETE TUSCAN STYLE ROOF TILES AS PER HOA REQUIREMENTS ON:

250microns (0,25mm) APPROVED UNDERLAY FIXED TO 38x38mm S.A.PINE BATTENS @ max 320mm Ctrs. SECURED TO 152x50mm S.A.PINE TRUSSES @ max. 760mm Ctrs. Min. GRADE 8 TIMBER
TRUSSES TO HAVE 152x50mm TIE BEAMS, RAFTERS & STRUTS SECURED ONTO 114X38mm WALL PLATE AND TIED DOWN INTO BRICKS TO A min. DEPTH OF 300mm WITH GALVANISED STEEL STRAPS
(30X1.6mm OR 4mm dia. GALVANISED STEEL WIRE)

ROOF PITCH - 23^{deg} WITH TREATED EXPOSED TIMBER SPROCKETS

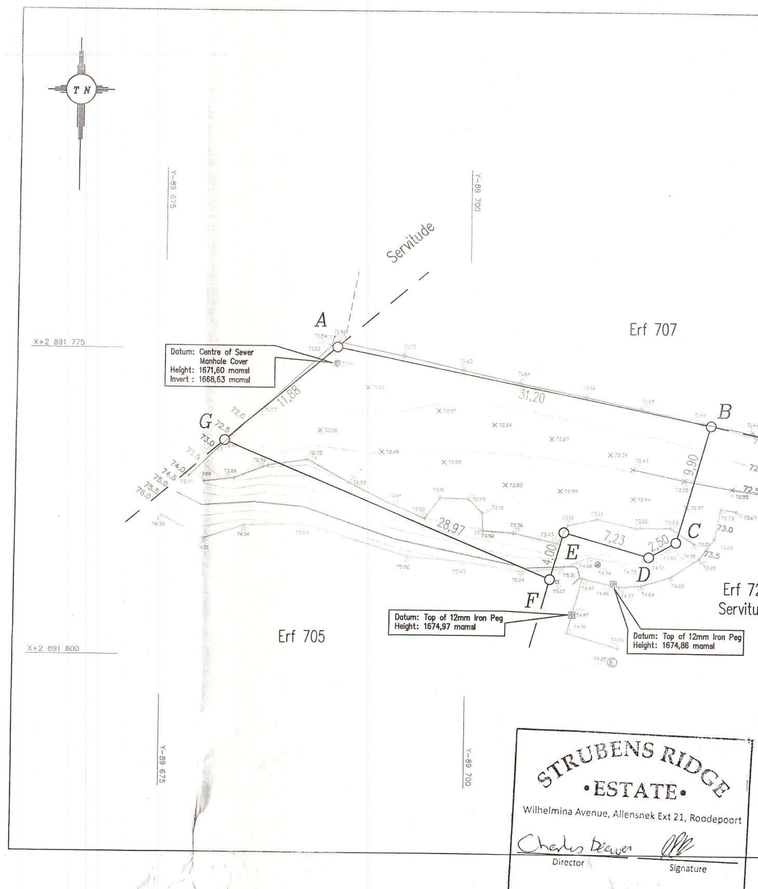
ROOF DESIGN TO BE APPROVED/DESIGNED BY ENGINEER

6.4mm Thk GYPSUM CEILING BOARDS TO BE FIXED AGAINST 38x38mm S.A.PINE BRANDERING @ SUITABLE Ctrs.

CEILING INSULATION - SEE SANS CALCULATIONS

ROOF OVERHANG = 600mm
NO GUTTERS & RWDP REQUIRED - 1m PAVED APRON AROUND BUILDING

ROOF PLAN 1:100



CONTOUR AND DETAIL PLAN
OF ERF 706
ALLEN'S NEK EXTENSION 21
TOWNSHIP

PROVINCE OF GAUTENG
SCALE 1:250 (A3)

0m 5m 10m 15m

NOTES
1. All measurements are in metres.
2. Type, interconnectivity and directions of flow of underground services to be verified/ determined by Engineer on site.
3. Site agent to check levels between bench marks prior to commencing construction.
4. Boundaries are approximatre and subject to final survey.

REVISIONS
0. 30/08/2016 – Drawing Issued

Surveyed by: ABZ	Date: August 2016
Drawn by: SJP	System: WG 27
Datum: mean sea level	Height constant: +1600m
Const: y=0 x=0	Contour interval: 0,50m
File Ref: 16/08/3711	Dwg No: ANX21_706_R0

LEGEND
DB = bottom of bank
DLT = top of loffelstein wall
DT = top of bank
EB = electric meter box
ELP = light pole
FE = electric fence
FEC = electric fence corner
MW = sewer manhole
RA = armco barier
RE = edge of road
STN = working station
WH = fire hydrant

R D CLARK
Professional Land Surveyors, Sectional Title Practitioners, Topographic surveyors, Aerial photographers
Tel 706-3061
Fax 706-2710
E-mail = office@rdclark.co.za

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
Charles Beaver — Director — Signature
Director — Signature
28/10/2016 — Date

PLANS ADMISSIBLE
C.K. Ackermann:
Carel Ackermann
2 Kareestr Wilropark
Tel/Fax 011 7645365
Cell 0825777387
Reg. No. ST0003

AREA SCHEDULE:

GROUND FLOOR

LIVING AREA - 107.87m2
COV PATIO - 24.86m2
COV ENT - 2.44m2
GARAGES - 38.30m2
MAIDS ROOM - 16.39m2

TOTAL - 189.86m2

FIRST FLOOR

LIVING AREA - 140.58m2
COV BALCONIES - 25.21m2

TOTAL - 165.79m2

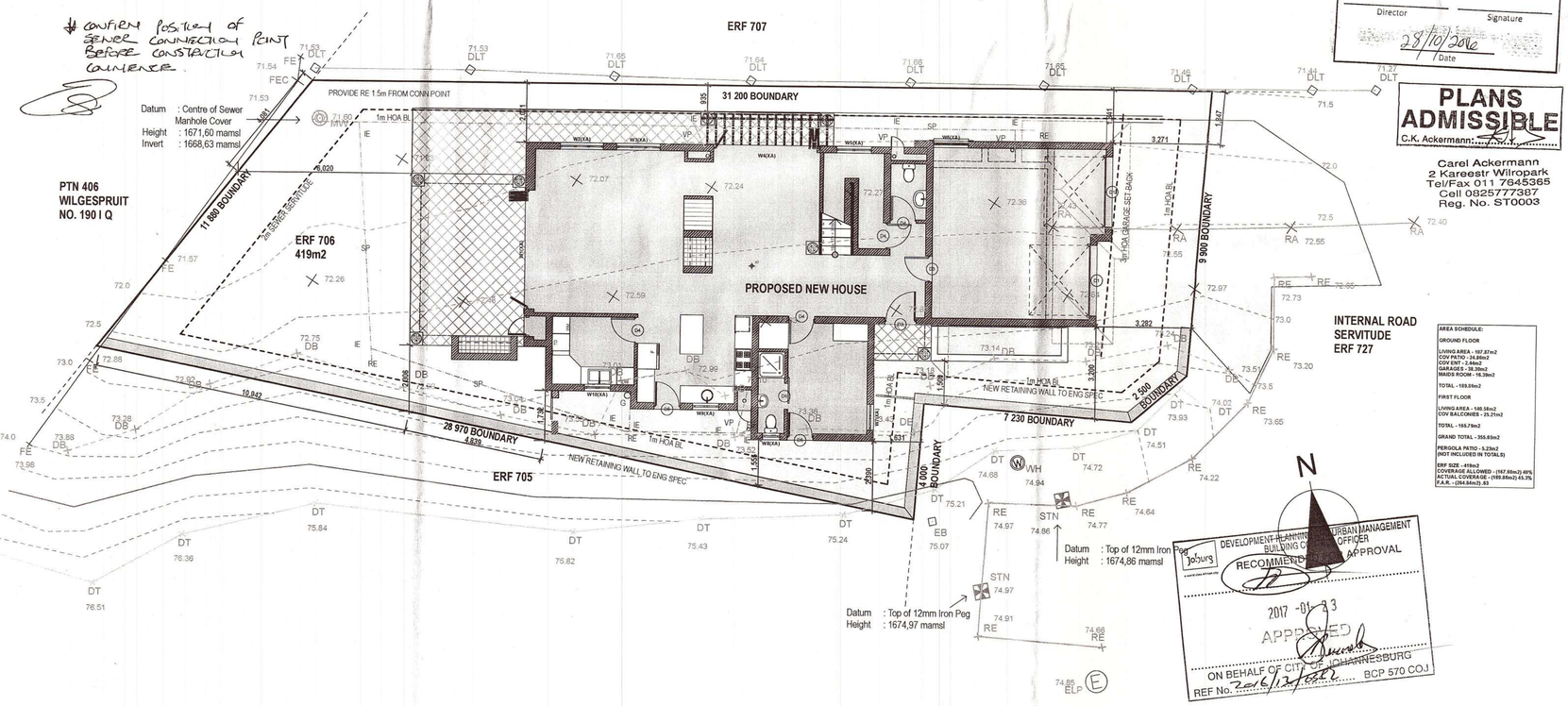
GRAND TOTAL - 355.65m2

PERGOLA PATIO - 5.23m2
(NOT INCLUDED IN TOTALS)

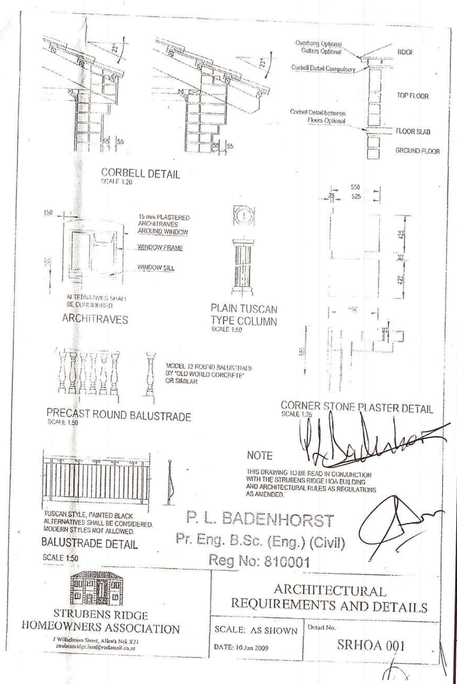
ERF SIZE - 419m2
COVERAGE ALLOWED - (167.60m2) 40%
ACTUAL COVERAGE - (189.86m2) 45.3%
F.A.R. - (264.84m2) .63

DRAWING REGISTER

DRAWING NUMBER	DRAWING NAME
706/01	GFP/SCHED/
706/02	FFP/SCHED/
706/03	SECT
706/04	ELE/PERSP
706/05	SP/RP
706/06	SANS 10400 XA



SITE PLAN 1:100



NOTE
THIS DRAWING TO BE READ IN CONJUNCTION WITH THE STRUBENS RIDGE HOA BUILDING AND ARCHITECTURAL RULES AS REGULATIONS AS AMENDED.

P. L. BADENHORST
Pr. Eng. B.Sc. (Eng.) (Civil)
Reg No: 810001

STRUBENS RIDGE HOMEOWNERS ASSOCIATION
2 Wilhelmina Street, Allen's Nek X21
strubens.info@homeowners.co.za

ARCHITECTURAL REQUIREMENTS AND DETAILS
SCALE: AS SHOWN
Detail No. SRHOA 001
DATE: 10 Jan 2009

ALL PAINT COLOURS, ROOF TILES, COLUMNS, HANDRAILS,
ETC. TO BE SUBMITTED FOR APPROVAL TO HOA PRIOR TO CONSTRUCTION COMMENCEMENT

REVISIONS

REV	DESCRIPTION	DATE

GENERAL NOTES

1. The Contractor is responsible for the correct setting out of the buildings and all external and internal walls with particular reference to boundaries, building lines and setting out points.
2. The Contractor is to verify all levels, heights and dimensions on site and is to check these against the drawing before putting any work in hand. All documentation must be compared with the actual building and discrepancies pointed out to the Architects before materials are ordered or work put in hand.
3. The Contractor is to locate and identify existing services on the site and to protect these from damage throughout the duration of the contract
4. The Contractor is referred to the specifications and allowed tolerances as per SANS that form part of this document as required standards for workmanship and materials. This document is to be used in conjunction with this drawing.
5. Any errors, discrepancies or omissions are to be reported to the Architect immediately
6. Contractor is to build in Approved D.P.C.'s, whether or not these are shown on drawings, to all external walls at each floor, beam or parapet level and to all windows, doors, grilles or other opening in external walls. Cavity walls to have stepped D.P.C.'s.
7. Any queries arising from all the above must be reported to the Architects for clarification before any work is put in hand.
8. Do not scale this drawing; refer to figured dimensions only

danie strydom architects
P.O. BOX 1995 SPRINGS 1560
TEL 011 366 1485
FAX 086 529 3632
E-MAIL: danie@dsarchitects.co.za
WEBSITE: www.dsarchitects.co.za
DANIE STRYDOM ARCHITECT
SACAP 3594

PROPOSED NEW HOUSE ON ERF 706 ALLENS NEK X 21 STRUBENS RIDGE ESTATE
POSTPARCEL

DRAWING NAME:	SP/RP
	ROOF PLAN, SITE PLAN, ANX21_706_R0, Strubens Ridge Building Guidelines, SAFETY GLAZING
PROJECT STATUS	COUNCIL SUBMISSION
DRAWN BY: JVW	CHECKED BY: DS
DRAWING SCALE	AS SHOWN printed on A1
DATE OF PROJECT / DATE PUBLISHED	26 SEP 2016 / Tuesday, 18 October 2016
DRAWING NUMBER	REVISION NUMBER
706/05	

AGillanders/WIP/GEORGE BELL-STRUBEN RIDGE/4.CONSTRUCTION DWGS/GEORGE BELL WD1.dwh