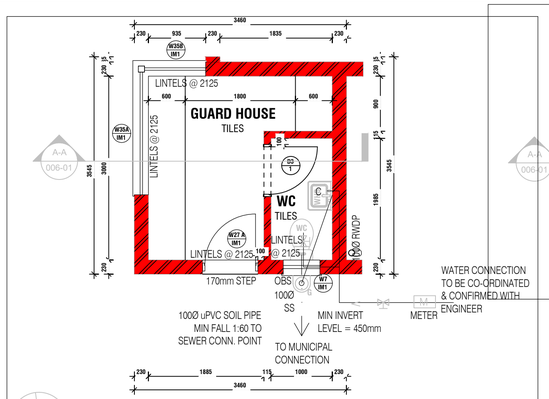
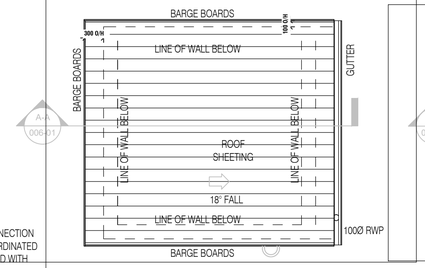
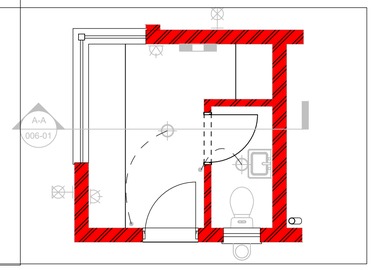


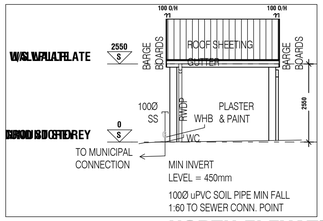
GROUND STOREY PLAN
SCALE: 1 : 50



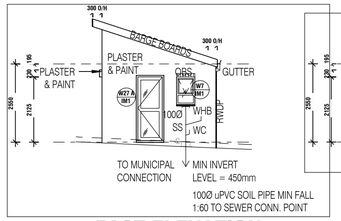
ROOF PLAN
SCALE: 1 : 50



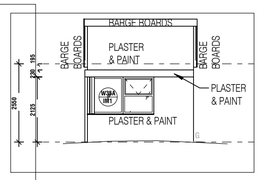
GROUND STOREY-ELECTRICAL
SCALE: 1 : 50



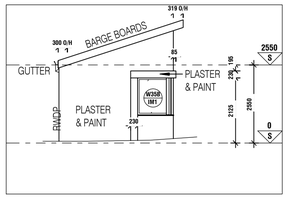
NORTH ELEVATION
SCALE: 1 : 100



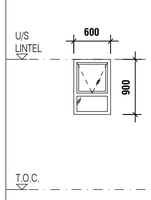
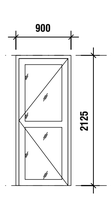
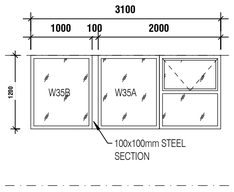
EAST ELEVATION
SCALE: 1 : 100



SOUTH ELEVATION
SCALE: 1 : 100



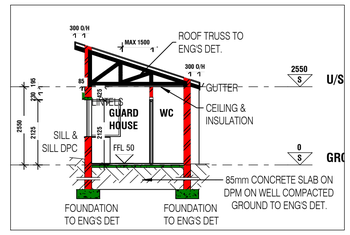
WEST ELEVATION
SCALE: 1 : 100

WINDOW TYPE	W6 SPECIAL 600x900	W27A SPECIAL 900x2125	W35 SPECIAL 600x1200
EXTERNAL ELEVATION NOTE: LEFT & RIGHT HAND OPENING SECTIONS TO BE CO-ORDINATED WITH ELEVATIONS			
LOCATION	WC	GUARD HOUSE	GUARD HOUSE
GLAZING	OBSCURE	CLEAR	CLEAR
QUANTITY	1	1	1

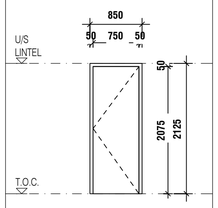
GLAZING NOTE:
- ALL GLAZING TO BE IN ACCORDANCE WITH SANS 1013, SANS 10400-N, RELATED STANDARDS, AND TO THE ENTIRE SATISFACTION OF ALL LOCAL AUTHORITIES.
- GLAZING CONTRACTOR TO SUPPLY COMPLETED FORM 2 AND NECESSARY DOCUMENTATION FOR COMPETENT PERSON(GLAZING) PRIOR TO INSTALLATION OF GLAZING.
- GLASS AND FRAMES TO COMPLY WITH RELEVANT SANS STANDARD.
- GLASS THICKNESS TO BE DETERMINDED BY COMPETENT PERSON (GLAZING).
- SAFETY GLAZING SHALL BE USED IN ALL APPLICATIONS SPECIFIED IN SANS 10400-N AND BE CLEARLY INDICATED AS SUCH.
- GLAZING CONTRACTOR TO SUPPLY A COMPLIANCE CERTIFICATE ONCE COMPLETE.

WINDOWS THAT ARE NOT POSITIONED WITH A DIMENSION ON FLOOR PLANS SHOULD BE TAKEN AS CENTRE OF WALL FROM INSIDE UNIT

WINDOW SCHEDULE
SCALE: 1 : 50



SECTION A-A
SCALE: 1 : 100

WINDOW TYPE	D3
EXTERNAL ELEVATION NOTE: LEFT & RIGHT HAND OPENING SECTIONS TO BE CO-ORDINATED WITH ELEVATIONS TIMBER DOORS AS PER MANUFACTURER' CATALOGUE	
LOCATION	WC
QUANTITY	1
DESCRIPTION	TIMBER FRAME, 750x2075mm FLUSH PANEL, RIGHT HAND TIMBER DOOR, 900x2125mm OPENING.
FIRE RATING	-

DOOR SCHEDULE
SCALE: 1 : 50

ELEVATION NOTES
- ALL STEPS AND LEVELS TO BE CO-ORDINATED AND CONFIRMED ON SITE BY THE CONTRACTOR WITH THE ENGINEER.
- VERTICAL WATERPROOFING TO ALL CHANGES IN LEVELS.
- FFL & DPC TO BE MIN 200mm ABOVE FGL
- FLASHING & COUNTER-FLASHING TO CHIMNEY.
- CHIMNEY PARAPET WALLS TO BE LAID TO FALL AND SEALED WITH A WATERPROOF PAINT BEFORE PAINT IS APPLIED.
- CHIMNEY AS PER SANS 10400-V.

SECTION NOTES
- 115mm BEAM FILL.
- MIN 6mm PLASTERBOARD / FIBRE CEMENT CEILINGS.
- PLASTER & PAINT TO CONCRETE SLAB SOFFITS.
- DPC TO SILLS AND CLOSING OF CAVITY WALLS.
- CONCRETE \ STEEL \ BRICK LINTELS OVER ALL WINDOWS.
- ALL LINTELS EXCEEDING 2 4m IN LENGTH ARE TO ENG'S SPEC.
- OBSCURE GLASS TO ALL BATHROOMS.
- AREA OF NATURAL LIGHT TO ALL HABITABLE ROOMS TO BE MINIMUM OF 10% OF FLOOR AREA.
- VENTILATION TO HABITABLE ROOMS TO BE SPECIFIED BY MECHANICAL ENGINEER IF LESS THAN 5%.
- ALL LIGHT AND VENTILATION TO BE IN ACCORDANCE SANS 10400.
- ALL FOUNDATIONS AND CONCRETE SLABS TO ENGINEER'S SIZES AND SPECIFICATIONS OR AS PER SANS 10400-H & B.
- VERTICAL WATERPROOFING TO ALL AREAS BELOW NGL.
- CONC. GROUND FLOOR SLAB TO BE LAID ON POLYOLEFIN UNDERFLOOR MEMBRANE (MIN 250 µm).
- TANKING TO BE PROVIDED TO BASEMENT WHERE REQUIRED.
- BUILDING TO BE PROTECTED AGAINST TERMITES AS PER SANS 10124.

DRAINAGE NOTES
- ALL DRAINAGE TO COMPLY WITH SANS 10400-P.
- RE TO BENDS GREATER THAN 45°, WITHIN 1.5m OF CONNECTION POINT, AT HIGHEST POINT OF DRAIN, AND MAX 25m ALONG RUN.
- ALL TRAPS TO BE PROTECTED BY AN AIR ADMITTANCE VALVE OR TRAP VENT.
- MIN INVERT LEVEL 450mm BELOW LOWEST FITTING IN CLOSED SYSTEM WITH STUB STACK.
- MIN GROUND COVER OF 300mm.
- ALL DRAINAGE PIPES TO BE uPVC.
- MIN INTERNAL SOIL PIPE DIMENSION:
  - 100Ø TO TOILET
- MIN INTERNAL WASTE PIPE DIMENSION:
  - 50Ø TO ALL WASTE PIPES (WT, WB, SW, B, S, WM & DW).
- WHERE DRAINAGE PIPES PASS UNDER A STRUCTURE, THEY ARE TO BE PROTECTED FROM LOAD, SLEEVED WITH AN RE AT BOTH ENDS IN AN ACCESSIBLE POSITION.
- MIN AND MAX GRADIENTS OF PIPES AS PER SANS 10400-P.
- MANHOLES AS PER ENGINEER.

- 50% OF HOT WATER VOLUME CALCULATED AS PER SANS 10252-1 TO BE PROVIDED BY MEANS OTHER THAN ELECTRIC RESISTANT HEATING.
- APPROVED HOT WATER HEATING SYSTEM TO BE INSTALLED AS PER SANS 10400-XA, SANS 10252-1 AND ANY REFERENCED DOCUMENTS.
- THERMAL PERFORMANCE OF GEYSER OR GEYSER AND BLANKET TO BE MIN R-VALUE OF 2.0.
- ALL HOT WATER PIPEWORK OUTSIDE OF THERMAL ENVELOPE TO BE CLAD WITH INSULATION WITH MIN R-VALUE OF 1.0 FOR PIPES ≤ 80mm AND 1.5 FOR PIPES > 80mm.
- ALL COLD WATER AND PRESSURE RELIEF PIPING WITHIN 1 METER OF GEYSER TO BE INSULATED AS FOR HOT WATER.

ROOF ASSEMBLY

CLIMATIC ZONE	1
MINIMUM PERMISSIBLE R-VALUE	3.7
DIRECTION OF HEAT FLOW	UP
PITCHED ROOF	
METAL ROOF SHEETING	0.3000 (m²·K)/W
135mm GLASS WOOL INSULATION	3.3750 (m²·K)/W
6.4mm GYPSUM PLASTERBOARD CEILING	0.0300 (m²·K)/W
TOTAL R-VALUE	3.7050 (m²·K)/W
FLAT ROOF	
OUTDOOR AIR FILM (7m/s)	0.030
4mm WATERPROOF MEMBRANE (RUBBER SYNTHETIC)	0.030
30mm SCREED	0.107
170mm PRECAST CONCRETE SLAB	0.120
135mm GLASS WOOL INSULATION	3.3750 (m²·K)/W
6.4mm GYPSUM PLASTERBOARD CEILING	0.0300 (m²·K)/W
INDOOR AIR FILM	0.110
TOTAL R-VALUE	3.8020 (m²·K)/W

NOTE: MATERIALS MAY BE SUBSTITUTED WITH SUITABLE ALTERNATIVES IF MINIMUM TOTAL R-VALUE OF 3.7 IS MAINTAINED

ROOF NOTES
FLAT ROOF NOTE:
- ALL CONCRETE SLABS TO ENG'S SPECIFICATION.
- ALL ROOF STRUCTURES TO ENG'S DETAIL & TO BE GRADED TO FULBORE OUTLETS AT MIN. FALL 1:80.
- TORCH ON WATERPROOFING TO SPECIALIST DETAIL & SPECIFICATION & TO HAVE A 10 YEAR WRITTEN GUARANTEE.

PITCHED ROOF - 18° PITCH
- PRE-PAINTED GALVANISED STEEL ROOF SHEETING ON VAPOUR BARRIER ON 50x76mm TIMBER PURLINS AT MAX 1200mm CENTRES ON PRE-FABRICATED TIMBER ROOF TRUSSES BY COMPETENT PERSON AT MAX 1200mm CENTRES ON 38x114mm WALLPLATE OR ALL AS PER RATIONAL DESIGN BY COMPETENT PERSON.
- FIBRE CEMENT FASCIAS & BARGE BOARDS / METAL FLASHING AS SPECIFIED.

PITCHED ROOF NOTE:
- ALL ROOF TRUSSES TO BE TO MANUFACTURER & CLIENT SPECIFICATION.
- ALL ROOF STRUCTURES, HIPS, VALLEYS, GABLES & RIDGES TO BE CO-ORDINATED & MEASURED ON SITE BEFORE ANY STEELWORK AND TIMBERWORK (GROUND STOREY) OR TIMBERWORK (FIRST STOREY) IS ORDERED, CUT OR FABRICATED, BY ENGINEER & ROOFER, SO AS TO OPTIMISE DESIGN & ENSURE WATERPROOFING STANDARDS.
- INSTALLATION OF UNDERTILE WATERPROOFING MEMBRANE / VAPOUR BARRIER TO BE IN ACCORDANCE WITH SANS 10400-L

ADDITIONAL NOTES
ALL PARAPET WALLS / EXPOSED COPINGS TO BE LAID TO FALL & SEALED WITH A WATERPROOF PAINT BEFORE PAINT IS APPLIED. FLASHING & COUNTER FLASHING TO PARAPET WALLS / CHIMNEYS.

ALL ROOF STRUCTURES TO BE IN ACCORDANCE WITH SANS 10400 & RELATED STANDARDS THEREOF OR AS PER RATIONAL DESIGN BY COMPETENT PERSON & TO THE ENTIRE SATISFACTION OF THE RELEVANT LOCAL AUTHORITIES

ELECTRICAL LEGEND

	CEILING LIGHT POINT	2
	DAY/NIGHT WALL LIGHT POINT	2
	DISTRIBUTION BOARD	1
	DOUBLE 15 AMP PLUG POINT	2

SERVICES LEGEND

WATER

WH	WATER HEATER
HP	HEAT PUMP
M	WATER METER
——	WATER - COLD (IN WALL / SLAB)
- - - - -	WATER - COLD (OVER / IN CEILING)
——	WATER - HOT (IN WALL / SLAB)
- - - - -	WATER - HOT (OVER / IN CEILING)
●	WATER - COLD (RISER)
○	WATER - COLD (DROPPER)
○	WATER - HOT (DROPPER)
>	NORMAL DIRECTION OF FLOW
⋈	STOP COCK

TOTAL BUILT AREA

GUARD HOUSE	12 m²
TOTAL	12 m²

LEGEND
- EXTENT OF PARKING STRUCTURE BELOW
- BUILDING LINES TO BE RELAXED
- BUILDING LINES
- PROPERTY LINE

EXISTING	SERVICE	PROPOSED
	SEWER	
	STORMWATER	
	WATER	

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GENERAL:
- Brickforce to be provided in every course of brick footing and every course for four courses above all door and window openings.
- Brickforce to be provided in every 5th course in walls there after.
- 250 Micro DPM under all ground floor slabs.
- All slabs, foundations beams, columns and roof trusses to engineer's details.
- Provide DPC to under all walls and windows.
- All levels and dimensions to be checked on site before any work is set in hand.
- All discrepancies, errors or omissions to be reported to the designer immediately.
- No deviation from the original drawings shall be permitted.
- All drawings and specifications to the accordance of the National Building Regulation and SABS 0400
- Do not scale drawings, use fingered dimensions only.
- No variation or instruction shall override the contract or contractors obligation to comply with the requirements of the local authorities.
- Vertical damproof course to be provided at all change in levels.
- All sub-soil conditions to be addressed by engineer. Trenching to be approved before foundations are cast.
- Entire drainage & waterproofing system to be installed by approved specialist.
- Gas bottles to be screened from view of street, to be ventilated and comply with SANS 10087
- All timbers shall be treated against termite & wood borer attack & fungal decay in accordance with the requirements of SANS 10005 & shall bear the product certification mark of a body certified by the South African national accreditation system.
- Where so required, the building shall be protected against subterranean termite activity by the effective application of soil insecticide to the site in accordance with the requirements of SANS 10124.
- All balustrades to be min 1m high above FFL all with max. horizontal openings of 100mmrs. All as per SANS 10400-B
- All depth of excavations, cut and fill, levels and heights of plinths and number of steps to be checked on site by the contractor
- All concrete strip footings to engineers design, detail and approval. Top of concrete strip footings to be min 400mm below NGL. All as per Part H of SANS 10400
- 25mm cement sand screed to top of 85mm concrete surface bed with 193mm mesh reinforcement on gunplas under surface green, on 50mm binding layer all on min 200mm compacted fill. All soil compaction to engineers specification. Top of surface bed to be min 150mm above NGL
- DPC to be 375 micron gunde brickgrip type and shall be applied to all sills, wall and changes in levels. All DPC to comply with SANS 248, SANS 298 or SANS 952-1
- All brickwork to be burnt clay stock brick (under stated otherwise) complying with SANS 10400 Part K
- Provide 2.8mm min / 3.5mm max brickforce to brick walls as per part K of SANS 10400 or as specified by the engineer
- Provide 75mm pre-stressed precast concrete lintels above all openings including doors and windows. Allow a min bearing 150mm. All as per SANS 1504

POOL:
- Swimming pools must comply in all respects with Part D, Subsection DD.4 of SANS 0400 -1990
- Pool to be fitted with a pool net / alarm system for child safety or a fence surrounding pool with self-closing gate
- All fences to comply with the requirements contained in the SABS 1390-0983 standard specifications. Attention must be drawn to item D4 in the NBR in the Government Gazette no. 9613. The owner is responsible for the correct fencing of pool. Build fence before filling the pool. Provide pool with approved filter

ROOF:
- Marley Modern concrete roof tiles @ 35 degrees pitch (rust slate) with Marley undertile membrane installed to manufacturers spec. on 38x38mm S.A.Pine Battens. Howe truss configuration consisting of 152x50mm S.A Pine Rafters, web members & tie beams spaced 760mm c/c. secured to 114x38mm S.A. Pine wall Plate with 4mm Galvanized wire ties. 150mm Aerolite ceiling insulation to be laid in roof void. Similar approved Roof overhang ~ 600mm
- The Headlap of the tiles must be min. 100mm and fully supported Marley high quality approved waterproofing undertile membrane to be installed over boarding or rigid sarking. Roof tiling and fixing as per manufacturer's specifications.
- 38 x 38mm SA Pine Branding to be spaced at 450mm max c.t.c fixed to underside of be beams. 10mm thick gypsum ceiling or similar & approved fixed to underside of 38x38mm SA Pine Brandering and joints skimmed with rhinolite plaster.
- 80mm Isoboard Inverfoil insulation laid on top of slab as per manufacturers specifications and finished with 50mm stone chip gravel layer in accordance with HOA guidelines.

GLASS THICKNESS:
- Safety Glass to be installed in all bathroom windows as per SANS 10400-N: 2012
- Safety Glass to be installed in as per SANS 10400 -N: 2012
- 0m -0.7m =3mm glass
- 0.75m -1.5m =4mm glass
- 1.5m - 2.0m =5mm glass
- 2.0m and bigger = safety glass

STORMWATER:
- All stormwater disposal to comply with the requirements of SANS 10400-R.
- Stormwater from downpipes and gutters from buildings shall discharge onto concrete-lined channels which, in turn, shall discharge the water at least 1.5m away from building onto surface drainage areas. Building without gutters shall be provided with impervious paving not less than 1.5m wide with a minimum slope of 1:20 all round
- All joints in stormwater channels and canals to reroute water from natural drainage paths to be sitable sealed to be watertight.

ENERGY EFFICIENCY NOTES:
- All energy efficiency in building to comply with par XA of SANS 10400 N.B.R.
- 50% of all hot water supply shall be derived from an alternate energy source. Solar heating systems to comply with SANS 1307, 10106 and 10254
- All hot water supply pipes to be insulated as per 4.4 of SANS 10400 part XA
- Where underfloor heating is used, the heating system shall be insulated underneath the slab as per 4.4.2 of SANS 10400 Part XA
- All exterior windows and doors to be sealed to prevent air infiltration. Air infiltration to comply with 4.4.4.3 of SANS 10400 Part XA
- Roof assembly to be insulated with suitable insulating material as required as per 4.4.5 of SANS 10400 Part XA
- Fenestration exceeding 15% fenestration to nett floor area to comply with requirements as per SANA 204 and SANS 10400 Part XA
- Any walling type falling outside of the standard single /double or cavity wall (plastered both sides) with R-Value of 0.35 Shall refer to part K of SANS 10400
- Any services that use energy or control the use of energy including heating, air conditioning and mechanical ventilation shall be in accordance with SANS 10400.
- The oretical annual energy consumption and demand shall be in accordance with SANS 10400

DRAINAGE NOTES:
- All drainage to comply with Part P of SANS 10400 National building regulations
- All drainage below building to be protected against loading
- All waist pipes running below the building to be sleeved. Min size of invert at the head of the drain to be 400mm.
- All rodding eyes to be marked at ground level is required by local authority. Rodding eyes to be provided at all bends and junctions along sewer at Max 250mm
- All sewer pipes below floor slabs to be encased in concrete. No bends or junctions in sewer pipes allowed below floor slabs.
- All soil fitting with a vertical discharge greater than 1220mm to have anti-syphon vent pipes.
- All 110mm Diameter uPVC pipe laid to fall of min 1:60
- All 110mm Diameter uPVC soil stack at head of drains
- All waste fittings to be provided with reseal traps

All waist pipes 3m or larger to be provided with vac traps and showers to be provided with brass waste traps

All storm water channels to be fully accessible as per R of SANS 10400
- Only registered and accredited plumbers may conduct work on the project. All as required as per SANS 10400
- All soil & waste pipes to be concealed in ducts. Access to soil & waste pipes internally and at ground level externally to be provided by means of a suitable sized access door

Owner:	**Engineer:**
Scale:	**Dwg Type:** / **Dwg nr:**
Architect/Designer:	**Drawn By:** DDB
Signature:	

Project Title: NORTHCLIFF HOUSING DEVELOPMENT

Scale:	**Drawing Type:**	**Pg nr.**
As indicated	GROUND STOREY PLAN, ROOF PLAN, ELECTRICAL, SECTION & ELEVATIONS	006-01

ISSUED FOR
INFORMATION

REV	DATE	DRAWN	DESCRIPTION
A	2021/07/19	DDB	ISSUED FOR INFORMATION

2022/11/15 06:53:22