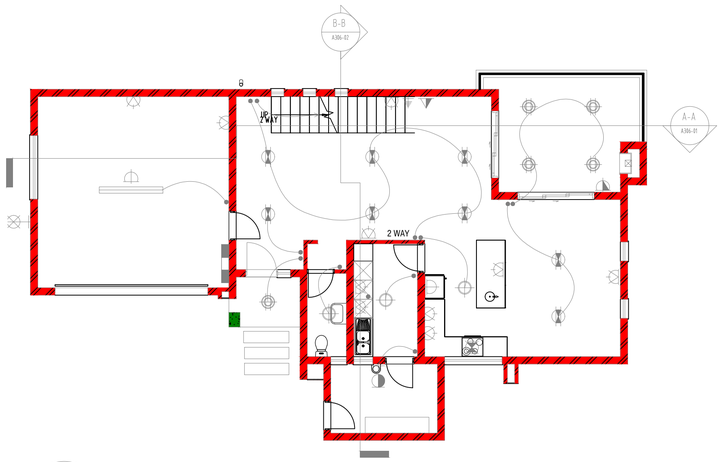
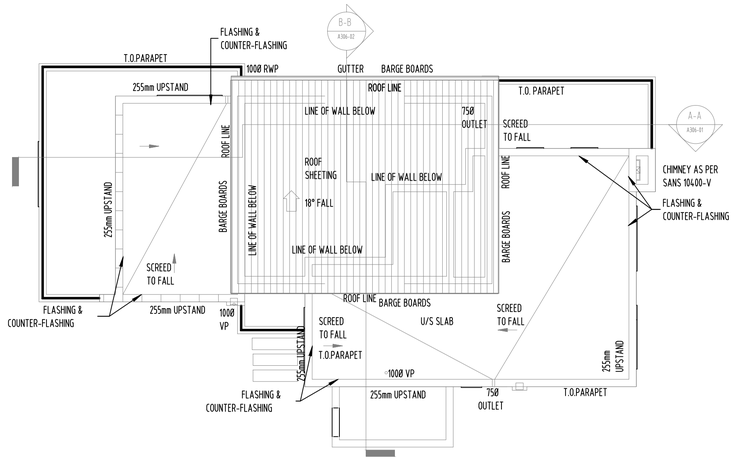
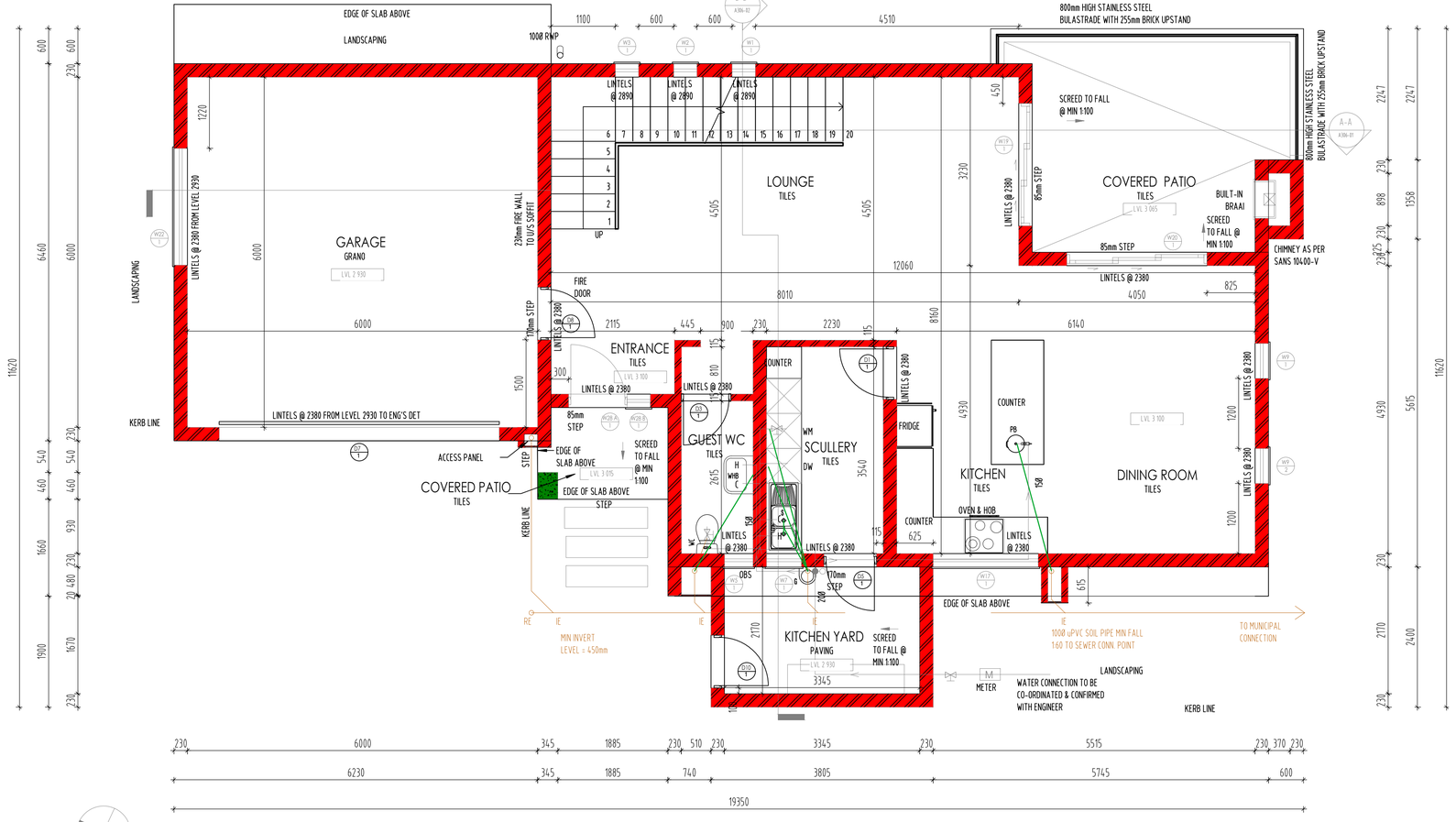
level 100 000=4195





2 GROUND FLOOR ELECTRICAL PLAN
SCALE 1:100

3 ROOF PLAN
SCALE 1:100



1 GROUND FLOOR PLAN
SCALE 1:50

ELECTRICAL LEGEND

	CEILING LIGHT POINT	3
	DAY/NIGHT WALL LIGHT POINT	1
	DOWNLIGHT POINT	8
	EXTERNAL CEILING LIGHT POINT	5
	EXTERNAL WALL LIGHT POINT	1
	FLUORESCENT LIGHT POINT	1
	WALL LIGHT POINT	0
	DATA POINT	1
	DISTRIBUTION BOARD	1
	ISOLATOR SWITCH	1
	TELEVISION POINT	1
	15 AMP PLUG POINT	2
	15 AMP WATERPROOF PLUG POINT	1
	DOUBLE 15 AMP PLUG POINT	9
	DOUBLE 15 AMP U/C PLUG POINT	1

UNIT 3 AREA	
	AREA
GROUND FLOOR	82,2
GARAGE	41,7
KITCHEN YARD	7,2
COVERED ENTRANCE	3,3
COVERED PATIO	16,9
STORE	0
STAIRS	5,1
FIRST FLOOR	118,8
OPEN BALCONIES	36,90m²
TOTAL	312,1

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 (m^2 K)/W
135mm GLASS WOOL INSULATION	3,3750 (m^2 K)/W
6.4mm GYPSUM PLASTERBOARD CEILING	0,0300 (m^2 K)/W
TOTAL R-VALUE	3,7050 (m^2 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 (m^2 K)/W
6.4mm GYPSUM PLASTERBOARD CEILING	0,0300 (m^2 K)/W
INDOOR AIR FILM	0.110
TOTAL R-VALUE	3,8020 (m^2 K)/W

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

LEGEND

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

EXISTING	SERVICE	PROPOSED
	SEWER	
	STORMWATER	
	WASTE	

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

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 dampproof 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 100mm's. 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 dynplus 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 guado 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 lunder 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 1390-1983 standard specifications. Attention must be drawn to item DA 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 stain) with Marley underfilm 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. 125mm 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 underfilm 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 tie beams. 10mm thick gypsum ceiling or similar & approved fixed to underside of 38x38mm SA Pine Brandering and joints skimmed with rhinolite plaster.
-80mm Isoboard inverted roof insulation installed 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 15m 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 suitable sealed to be watertight.

ENERGY EFFICIENCY NOTES
-All energy efficiency in building to comply with par XA of SANS 10400 N.B.B.
-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 vertical 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 N 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:
Architect/Designer: T1203	Drawn by: RV 2022/11/09
Signature:	

Date:	Rev:	Revision Description:
2022/11/09	A	issued for COUNCIL SUBMISSION

PROJECT TITLE:

ERF 199, NORTHCLIFF
NEW RESIDENTIAL DEVELOPMENT

Scale:	Drawing description:	Page size:
1 : 50/100	UNIT TYPE 3-GROUND FLOOR PLANS AND ROOF PLAN	A1

JOB NR.	DRAWING NR.	REV.
16001	01 01 A207	A

Tel: 087 255 9631
Fax: 086 518 1641
Cell: 082 566 0579
E-mail: riana@rdasa.co.za
Reg no: 2019/175648/07
PO Box 10473, Edenglen, 1613
RDA ARCHITECTURAL DESIGN (PTY) LTD