



NOTE:
 THIS DRAWING SERVES AS AN ELECTRICAL GUIDE LAYOUT AND NO CLAIM CAN BE MADE FOR DISCREPANCY ON SITE
 ANY DISCREPANCY SHOULD BE REPORTED TO ARCHITECT OR OWNER BEFORE COMMENCEMENT OF WORK

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
[Symbol]	SINGLE POLE ONE WAY SWITCH
[Symbol]	TWO WAY SWITCH
[Symbol]	DOUBLE STRIP FLUORESCENT LIGHTING
[Symbol]	TRACK LIGHTING SYSTEM
[Symbol]	CEILING MOUNTED LIGHT POINT
[Symbol]	DOWN LIGHTING (LOW VOLTAGE)
[Symbol]	WALLMOUNT LIGHT POINT
[Symbol]	GARAGE LIGHTPOINT WATERPROOF
[Symbol]	LIGHTPOINT WATERPROOF
[Symbol]	SPOT LIGHT
[Symbol]	UNDERFOOT LIGHT (DOWNWARD LIGHTING)
[Symbol]	WALL MOUNT LIGHT @ 1.1m height
[Symbol]	MOTION SENSOR
[Symbol]	POWER POINTS & SOCKETS
[Symbol]	SHAKER PLUG POINT 1.1m ABOVE FFL
[Symbol]	PLUG POINT
[Symbol]	PLUG POINT 1.1m ABOVE FFL
[Symbol]	DOUBLE PLUG POINT
[Symbol]	DOUBLE PLUG POINT 1.1m ABOVE FFL
[Symbol]	CEILING PLUG POINT
[Symbol]	WATERPROOF PLUG
[Symbol]	STOVE POINT
[Symbol]	WATERPROOFING UNIT (BY SUPPLIER'S REQUIREMENT) (plus, radiator and descent)
[Symbol]	ELECTRONIC BELL
[Symbol]	GARAGE DOOR MOTOR
[Symbol]	CONTROLS & SUPPLY POINTS
[Symbol]	GETTER 200 - SOLAR GETTER
[Symbol]	MAIN DISTRIBUTION BOARD
[Symbol]	SUB BOARD
[Symbol]	METER BOX
[Symbol]	ALARM & SECURITY LEGEND
[Symbol]	PASSIVE FITTER AT CORNER HEIGHT
[Symbol]	ALARM CONTACT POINT (ON DOOR, WINDOW)
[Symbol]	PANIC SWITCH
[Symbol]	ALARM MAIN BOARD
[Symbol]	KEYBOARD
[Symbol]	CCV CAMERA POINT 2.2m ABOVE FFL
[Symbol]	Y.C.A. RECORDS CCV VIDEO
[Symbol]	DVR BOX FOR CCV CAMERAS
[Symbol]	ALARM BELL
[Symbol]	ALARM BELL CONNECTED TO MAIN ALARM SECURITY SYSTEM
[Symbol]	SENSOR LIGHTS FINAL POSITION TBC
[Symbol]	DATA & TELEPHONE
[Symbol]	INTERCOM UNIT
[Symbol]	TELEPHONE JACK PLUG
[Symbol]	DATA
[Symbol]	T.V. DATA - TV ANTENNA SATELLITE

KITCHEN NOTE:
 Final arrangement of lights and plugs in the kitchen & scullery to be in accordance with kitchen manufacturers layout

Energy Demand Calculation:

1) Energy Demand Allowed 5w/m²
 area x allowed usage
 639.51 x 5w/m² = 3197.55w

2) Energy Consumption
 a = year = 52 weeks x 7 days x 5 hours.
 Assume 5 hour usage based on use from 17:00 to 22:00 hours daily.
 Allowed 5kWh/m².a

GROUND FLOOR LIGHTS TOTAL:
 22w + 3w + 11w + 18w + 36w + 18w + 18w + 11w + 32w + 18w + 11w + 32w + 6w + 55w + 64w + 36w + 55w + 64w + 15w + 6w + 3w + 6w + 36w + 18w + 22w = 562 w / 0.562 kWh

FIRST FLOOR LIGHTS TOTAL:
 36w + 12w + 36w + 36w + 6w + 36w + 51w + 15w + 6w + 3w + 6w + 9w + 36w + 51w + 36w + 9w + 9w + 12w + 9w = 414 w / 0.414 kWh

LIGHTS TOTAL:
 562W + 414W = 976W
 0.976kWh/h x time
 976x1820 = 1776.32kwh.a

1776.32 kwh/a < 3197.55 kwh/a
 ENERGY USAGE WITHIN REQUIRED LIMIT OF 5w/m²

NOTES

- A: FOOTINGS:-**
 1. ALL FOOTINGS TO BE DONE TO ENGINEERS DETAIL
- B: FLOORS:-**
 1. SURFACE BEDS:-
 FLOOR FINISH LAID ON CEMENT SCREED ON RC SLAB ON APPROVED GREEN AS GREEN WATERPROOF SHEETING LAID ACCORDING TO ENGINEERS DETAIL.
 2. SUBFLOOR GROUND TO BE POISED WITH PENTACHLOROPHENOL SOLUTION IN ACCORDANCE WITH S.A.S. 0124 CODE OF PRACTICE AND ANT GUARDS ARE TO BE PROVIDED TO COMPLY WITH LOCAL AUTHORITY REGULATIONS.
 3. SUSPENDED SLABS:-
 FLOOR FINISH BY OWNER LAID ON CEMENT SCREED WITH MIN 20mm THICKNESS ON REINFORCED CONCRETE SLAB TO ENGINEERS DETAIL.
 4.9 No shade netting, bamboo/wood material or unapproved material, flat or lean-to steel structures may be used for carports or any other coverage or screening. An exception may be made with prior approval from directors for kids play areas.
 4.10 Solar heating panels, if used, should be incorporated into the building and part of the basic structure and should be clearly shown and annotated on the approval drawings.
 4.11 Awnings, TV aerials, air conditioning units, satellite dishes and other items, which do not form part of the basic structure, are to be clearly shown and annotated on the approval drawings and screened where possible.
 4.12 No exposed plumbing will be allowed and washing lines should be fully screened and not visible from the street elevations and other elevations on adjoining properties.
 4.13 No deviations from the approved drawings will be permitted unless the deviation is re-submitted and approved in writing prior to construction.
 4.14 No dwelling unit (except group stands) may be smaller than 150m² excluding garages and out-buildings.
 4.15 The light source to all external lighting (except under covered patio or garage roofs) must be wall mounted or otherwise may not be more than 1m above natural ground level and may not shine onto adjacent properties. ALL external site lighting is subject to neighbours approval.
- C: WALLS:-**
 1. APPROVED CLAY BRICKWORK, TO COURSES
 1. OF BRICKWORK ARE TO BE REINFORCED WITH BRICKWORK IN SOLID CEMENT MORTAR JOINTS BELOW WALL PLATE LEVEL, ABOVE WINDOW HEAD LEVEL, & BELOW WINDOW SILL LEVEL.
 2. EXTERNAL FACE OF INNER SKIN OF ALL EXTERNAL WALLS TO BE BAGGED AND BENDERED WATERPROOF WITH SUITABLE APPLICATIONS OF BITUMEN.
 3. PRE-CAST CONCRETE LINTOLS ABOVE DOOR AND WINDOW HEAD LEVEL.
 4. GALVANISED WIRE TIES TO BE BUILT IN ALL 230mm WALLS AT 800 CENTRES HORIZONTALLY AND EVERY 6th COURSE VERTICALLY.
 5. DAMP PROOF COURSE TO BE EMBOSSED GUNDLÉ BRICKGRIP 375 micron SABS 952-1969 TYPE B WELL TAPED AT ALL JOINTS AND INTERSECTIONS AND BEDED AND JOINTED IN CEMENT MORTAR.
 6. FLAT ROOFS - WATERPROOFING ON CEMENT SCREED TO FALLS INTO OUTLET ON RC SLAB TO ENG. DETAIL.
 TO COMPLY WITH SANS 10400 - L:2011
G: CEILING:-
 12.5mm GYPSUM SKIMMED RHINOBOARD ON SA PINE BRANDBLING AT MAX 200mm c.c. WITH SHADOWLINE CORNICE TO ARCHITECTS DETAIL.
H: WINDOWS:-
 1. ALL NEW HWOOD & ALUMINIUM WINDOWS AND DOORS.
 2. ALL IRONMONGERY SELECTION TO BE CONFIRMED WITH THE OWNER.
H: STAIRS:-
 1. RC STAIRS
 TREAD 300mm
 RISE 200mm
 TO ENGINEERS DETAIL.
 ALLOW WOOD & WIRED BALLUSTRADE
J: DECKING
 1. DECKING TO ENGINEERS DETAIL
GENERAL:
 1. ALL WORK TO COMPLY WITH NBR AND STANDARDS ACT SANS 10400.
 2. ALL DIMENSIONS AND LEVELS TO BE CHECKED.
 3. ARCHITECT TO BE NOTIFIED OF ANY DISCREPANCIES, DRAWINGS NOT TO BE SCALED.
 4. SAFETY GLAZING TO BE IN ACCORDANCE WITH SANS 10137 CODE OF PRACTICE - THE INSTALLATION OF GLAZING IN BUILDINGS.
 5. BALUSTRADES, HANDRAILS, HEIGHTS AND OPENINGS TO COMPLY WITH MM3 AND DD2.4 OF SANS 10400
 6. RWOP TO HARDENED SURFACE TO STORMWATER MANHOLE
 7. ALL STORMWATER DRAINAGE TO ENG. DETAILS
 8. OPC TO BE INSTALLED TO UNDER WINDOW SILLS
 9. ALUMINIUM RWOP AND GUTTER
DRAINAGE:
 1. INSPECTION EYES TO BE PROVIDED AT JUNCTIONS AND BENDS TO ALL SOIL AND WASTE PIPES.
 2. ALL INTERNAL PLUMBING TO BE EXPOSED.
 3. ALL FITTINGS ON SEPARATE BRANCHES WITH SEPARATE ENTRIES TO SINGLE STACK DRAINAGE.
 4. ALL SOIL PIPES TO BE MIN 100mm Ø.
 5. ALL WASTE PIPES TO BE MIN 50mm Ø.
 6. VENT VALVES TO BE FITTED TO ALL FITTINGS.
 7. ALL URINALS TO BE FITTED WITH 40mm DEEP SEAL TRAPS AT FLOOR LEVEL.
 8. ALL SHOWERS TO HAVE HOT AND COLD WATER.
ENDORSEMENTS:-
 FLOORS:-
 TO COMPLY WITH SANS 10400 - J:2011
 WALLS:-
 TO COMPLY WITH SANS 10400 - K:2011
 ROOF:-
 TO COMPLY WITH SANS 10400 - L:2011
 STAIRS & BALUSTRADE:
 TO COMPLY WITH SANS 10400 - M:2011
 GLAZING:-
 TO COMPLY WITH SANS 10400 - N:2011
 DRAINAGE:
 TO COMPLY WITH SANS 10400 - P:2011
 STORMWATER:-
 TO COMPLY WITH SANS 10400 - R:2011
 NATURAL LIGHTING:-
 TO COMPLY WITH SANS 10400 - O:2011
 ENERGY EFFICIENCY:
 TO COMPLY WITH SANS 10400 - XA:2012 & 204 - 2011

TABLE OF REVISIONS

REVISION	DATE	DESCRIPTION
A	30-07	ESTATE SUBMISSION

OWNER'S SIGNATURE
 ARCHITECT'S SIGNATURE
 ENGINEERS SIGNATURE

DEFT DESIGNS & PROJECTS architects
 Deft Design & Projects (Pty) Ltd
 Reg. No. (2015/102247/07)

PrArch: Olwehu Prince. Z Mkhize
 Sacap Reg: PrArch: 39624361

PROPOSED NEW DWELLING
 MR SANNY PAPI
 SEC 41
 ERF 1988
 RAYTON
 EMERALD HILLS

SCALES USED: 1:100

DRAWN: NJB
DATE: 27.2020
TRACED: & 204 - 2011
DATE:

CHECKED: OPZ
ARCHITECT'S SIGNATURE:
APPROVED:
DATE:

DRAWING DESCRIPTION:
 ELECTRICAL

PROJECT NUMBER: 1701
DRAWING NUMBER: 107

SUBMISSION