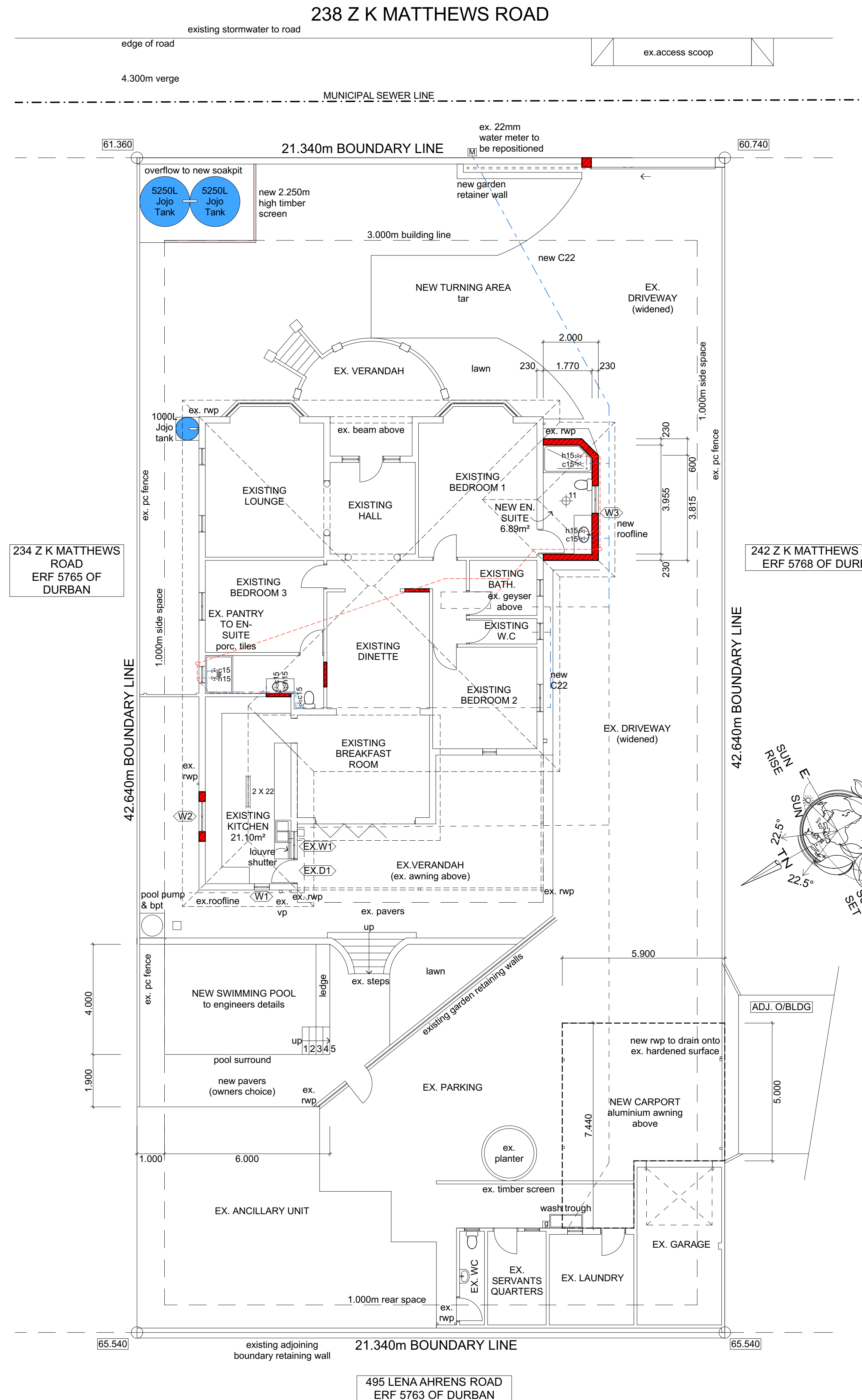


ENERGY EFFICIENCY AND WATER RETICULATION



SITE PLAN / GROUND STOREY PLAN
SCALE 1:100

ENERGY EFFICIENCY - MAIN DWELLING

INFORMATION FOR COMPLIANCE
WITH SANS 10400 - PART XA -

OCCUPANCY CLASSIFICATION - H3
CLIMATE ZONE - 5
ORIENTATION - SOUTH EAST

FLOORS:
GROUND FLOOR - N/A
FIRST FLOOR - N/A
WALLS MASONRY - 230mm BRICK EXTERNAL WALLS

ROOF ASSEMBLY
FOR CLAY TILE ROOF WITH HORIZONTAL CEILINGS
22.5 DEGREES - HORIZONTAL CEILING (UNVENTILATED)
TOTAL R-VALUE REQD. : 0.55m²/K/W
DIRECTION OF HEAT FLOW : DOWN

BASIC R-VALUE OF ROOF
Outdoor air film (7m/s) : 0.03
Roof cladding : 0.02
Roof Air Space : 0.28
Plasterboard, gypsum (10mm) : 0.06
Indoor air film (still air) : 0.16
Total R-value : 0.55msq k/W

Thermal Insulation Required : 2.15msq, k/W
Generic insulation product added : Flexible polyester blanket
Density of generic insulation added : 11.5kg/m³
Thickness of generic insulation required : 100mm

CONDUCTANCE AND SOLAR HEAT GAIN (SHG) FOR FENESTRATION: MAIN DWELLING

NETT FLOOR AREA - 27.99m²
FENESTRATION AREA - 4.04m²
% FENESTRATION - 14.40%
NO CALCULATIONS REQUIRED

LIGHTING & POWER - MAIN DWELLING

BUILDING AREA - 33.79m²
TOTAL LAMP ENERGY DEMAND (W) - 55W / 169W PERMITTED
OR
TOTAL LAMP ENERGY DEMAND (W/msq) - 1.63W/m² (ACCEPTABLE)
AVAILABLE ENERGY DEMAND LIGHTS - 114W
TOTAL ANNUAL ENERGY CONSUMPTION LIGHTS (KWh) - 140.14KWh/ 169KWh PERMISSIBLE
OR
TOTAL ENERGY CONSUMPTION LIGHTS (kWh/msq) - 4.15kWh/m² (ACCEPTABLE)
AVAILABLE ENERGY CONSUMPTION LIGHTS - 28.81kWh

| LAMP POWER (W) RATING | NO. OF LAMPS | HOURS IN USE / DAY |
|-----------------------|--------------|--------------------|
| 11 | 1 | 7.0 |
| 22 | 2 | 7.0 |

ELECTRICAL LEGEND (ONLY FOR LAMPS)

| | |
|--|-------------------------|
| | 14W COMPACT FLOURESCENT |
| | 22W FLOURESCENT TUBE |

HOT WATER SERVICES - N/A

NO ADDITIONAL BEDROOMS PROPOSED THEREFORE NO POPULATION INCREASE

SYMBOLS

- WATER METER
- MIXER (SINGLE MANUAL CONTROL, SINGLE VALVE)
- STOPCOCK
- NON-RETURN VALVE
- PIPE CARRYING COLD WATER
- PIPE CARRYING HOT WATER
- STORAGE WATER HEATER
- INTERNAL TAP
- HEAT PUMP
- 22mm COLD WATER RISING MAIN
- HOT WATER DROP MAIN

ABBREVIATIONS

- H - 15 - COLD WATER SUPPLY PIPE & SIZE
- C - 15 - HOT WATER SUPPLY PIPE & SIZE
- shr - SHOWER
- wc - TOILET PAN (WATER CLOSET)
- wh - STORAGE WATER HEATER
- whb. - WASH HAND BASIN
- cu - COPPER
- wt - WASH TROUGH
- wm - WATER METER
- sv - STOP VALVE

NEIGHBOURS CONSENT

| NAME | ADDRESS |
|-------------------|----------------------|
| ROGER JOHN WILSON | 242 ZK MATTHEWS ROAD |
| TELEPHONE | I.D. NO. |
| 082 4176 751 | 5711245089088 |
| SIGNATURE | |
| NAME | ADDRESS |
| | |
| TELEPHONE | I.D. NO. |
| | |
| SIGNATURE | |

ZONING : SPECIAL RESIDENTIAL 400
OCCUPATION CLASSIFICATION : H3

DRAWING TITLE
PROPOSED ADDITIONS & ALTERATIONS TO DWELLING, NEW AWNING & SWIMMING POOL AT 238 Z K MATTHEWS ROAD, GLENWOOD ON ERF 5767 OF DURBAN

OWNER
P. T. & L. M. A. DENNY

OWNER'S SIGNATURE
26.09.22
DATE

DRAWING TITLE
SUBMISSION DRAWINGS:
ENERGY EFFICIENCY & WATER RETICULATION

DESIGNER



Principal agent: Mahen Padayachee
SACAP Registration: ST 1061
75 Lemuria Grove, Arena Park, Chatsworth, 4092
Cell: 082 667 0899 Office: 031 404 8492
Email: mahen@saol.com

DATE
21. 09. 2022
SCALE
AS SHOWN

DRAWING NO.
MPBD 472
SHEET SIZE
A1

SHEET NO.
3 OF 3