

**ROOF: 3degrees.**  
 LONG SPAN METAL SHEETS  
 ON 50 x 76 PURLINS AT 1.400 CENTRES  
 ON 38 x 152 RAFTERS AT 1.200 CENTRES  
 TO ENGINEER'S DETAILS  
 FIBRE CEMENT FASCIA AND BARGEED.  
 PVC GUTTERS AND DOWNPIPES.

**DIRECTION OF HEAT FLOW**  
 DOWN  
 TOTAL R VALUE 2.70m2 K/W  
 R VALUES ROOF: METAL SHEETS 0.36m2 K/W  
 R VALUE 100mm GYPSUM CEILING 0.06m2 K/W  
 REQUIRED R VALUE FOR INSULATION 2.28m2 K/W  
 100mm THICK FLEXIBLE PINK AEROLITE FIBRE  
 GLASS BLANKET R VALUE 2.50m2 K/W  
 R VALUE ACHIEVED = 0.48 + 0.06 + 2.5 = 3.04m2 K/W  
 R VALUE ACHIEVED > TOTAL R VALUE

**FLOOR:**  
 100mm BS. REF. 100 MESH REINFORCED CONCRETE SURFACE BED  
 ON 250 MICRON SABS APPROVED ON COMPACT EARTH.  
 EARTH TO BE POISONED.  
 NO UNDER FLOOR HEATING OR PERIMETER FLOOR SLAB EDGE INSULATION.

**WALLS:**  
 ALL WALLS TO BE REINFORCED WITH BRICKFORCE TWO COURSES BELOW  
 WINDOW SILL. OVER DOOR AND WINDOW HEAD AT WALL PLATE LEVELS  
 IN SOLID CEMENT MORTAR JOINTS.  
 FOUNDATIONS TO ENGINEER'S DETAILS.  
 FOUNDATIONS TO COMPLY WITH THE DESIGN  
 REQUIREMENTS MADE BY THE ENGINEER IN  
 THE GEOTECHNICAL ENGINEER'S REPORT.  
 BALUSTRADES - SPACING NOT TO EXCEED  
 100mm. IN COMPLIANCE WITH SANS 10400  
 PART D.  
 STAIRS - RISERS AND TREADS TO COMPLY  
 WITH SANS 1000 PART M.  
 RISERS - 200 MAXIMUM.  
 TREADS - 250 MINIMUM

**LIGHTING AND POWER:**  
**DWELLING:**  
 LOUNGE/DINING/KITCHEN. 5 X 11 cft.  
 SCULLERY 1 X 11 cft.  
 GARAGE 2 X 11 cft.  
 TV LOUNGE 1 X 11 cft.  
 GUEST BEDROOM 1. 1 X 11 cft.  
 GUEST BEDROOM 2. 1 X 11 cft.  
 EN- SUITE 1 X 11 cft.  
 MASTER BEDROOM 2 X 11cft.  
 DRESSING 1 X 11cft.  
 EN-SUITE 1 X 11cft.  
 PRIVATE GYM 1 X 11cft.  
 OPEN AREA 2 X 11cft.  
 BOY'S BEDROOM 1 1 X 11cft.  
 BOY'S BEDROOM 2 1 X 11 cft.  
 GIRL'S BEDROOM 3 1 X 11 cft.  
 EN- SUITE 1 X 11 cft.  
 TOTAL = 23 X 11 = 253 WATTS.  
 LIGHT USAGE PER DAY = 5 hours  
 MAXIMUM ENERGY DEMAND: 426.757 X 5 = 2.133.785WATTS  
 ACHIEVED ENERGY DEMAND = 253 WATTS  
 ACHIEVED ENERGY DEMAND < MAXIMUM ENERGY DEMAND  
 ACHIEVED ENERGY CONSUMPTION = 426.757 X 5 = 2.133.785KWH.  
 ACHIEVED MAXIMUM ENERGY CONSUMPTION PER ANNUM  
 = 426.757 X 5 X 365 = 778.831.525KWH.  
 ACHIEVED ENERGY CONSUMPTION < MAXIMUM ENERGY CONSUMPTION.

**WATER RETICULATION:**  
 7 PERSONS - 115 LITRES PER PERSON.  
 7 X 115LITRES = 805 LITRES PER DAY  
 ENERGY DEMAND 805WATTS PER SQ. M.  
 ENERGY CONSUMPTION-SKWATTS/PER SQ. M.  
 PER ANNUM. MASS 115 LITRES X 7 PEOPLE = 805LITRES.  
 HSE = 4.182KJ/ULS - TEMPERATURE (DIFFERENCE) 18degrees  
 805 X 4.182 X 18 KJ/ULS = DEMAND  
 60.597/1000 = 60.597 MEGAJOULES.  
 TAKE 50% = 30.298 MEGA JOULES.

**HOT WATER RETICULATION**  
 GEYSER - PRIMARY SOURCE - SOLAR ESKOM APPROVED SUPPLIER AND  
 ACCREDITED INSTALLER. KW/VT/150L SOLAR HEAT GEYSER (DIRECT)  
 1000 X 2000 X 80MM PANELS X 1 AS RECOMMENDED BY SUPPLIER  
 SECONDARY - BACK UP POWER SUPPLY OF 2KW  
 NOTE POWER SUPPLY IS 50% OF NORMAL KW. GEYSER BLANKET - MIN  
 R VALUE REQUIRED 2 SABS APP. ISOETHERM 110MM TO ACHIEVE R VALUE  
 OF 2.73

**STRUCTURAL**  
 SOLAR PANELS SUPPORT & FIXING TO STRUCTURAL ENGINEERS DETAILS  
 ADDITIONAL LOADING TO BE ACCOMMODATED FOR TO ENGINEER'S  
 DETAIL AND SPECIFICATIONS.

**PIPPING INSULATION**  
 1. ALL EXPOSED PIPING SUPPLYING HOT WATER TO BE INSULATED WITH  
 THERMAL PRODUCTS WITH MIN. R VALUE OF 1  
 2. ALL HOT WATER PIPES (COPPER) ARE TO BE EMBEDDED IN WALL. ALL  
 EXPOSED HOT WATER PIPES TO AND FROM HOT WATER CYLINDERS TO  
 BE INSULATED WITH PIPE INSULATION EXPOSED PIPES PRODUCT  
 ECOCLEX FLEXIBLE PIPE INSULATION TO 23MM COPPER PIPE. OVERALL  
 DIAMETER INCLUDING LAGGING = 25.5MM. PRODUCT IS SANS 10177  
 APPROVED.  
 3. CONTRACTOR TO ENSURE MIN. DISTANCE TO BE ACHIEVED BETWEEN  
 GEYSER AND FITTING

**WATER PIPES:**  
 INTERNAL DIAMETER OF HOT WATER SERVICE PIPE = 80mm.  
 MINIMUM R VALUE FOR PIPE INSULATION = 1.0  
 100mm THICK PINK AEROLITE FLEXIBLE FIBRE GLASS  
 BLANKET R VALUE 2  
 GEYSER TO BE WRAPPED WITH PINK AEROLITE FLEXIBLE  
 FIBRE GLASS BLANKET R VALUE 2  
 50% OF WATER TO BE HEATED CONVENTIONALLY AND  
 50% OF WATER TO BE HEATED BY HEAT PUMP.

CONTRACTOR IS TO ENSURE NO  
 INTERFERENCE IS SUSTAINED TO  
 NEIGHBOURING STRUCTURES DURING  
 CONSTRUCTION.

**IMPORTANCE**  
 PRIOR TO UNDERTAKING ANY  
 CONSTRUCTION WORK ON SITE. PROVING  
 TRENCHES ARE DUG TO VERIFY THAT NO  
 UNDERGROUND SERVICES EXIST WHICH  
 WILL BE AFFECTED BY THE PROPOSAL.  
 WHERE UNDERGROUND MUNICIPAL  
 SERVICES ARE LOCATED, THE RELEVANT  
 MUNICIPAL SERVICE DEPARTMENT IS TO  
 AUTHORISE THAT WORK OVER SUCH  
 SERVICES MAY CONTINUE.

**DEVIATIONS TO APPROVED PLAN  
 NO: 276 05 18  
 AT NO: 30 KENTUCKY DRIVE  
 ON PORT. 366 OF ERF. 3193 AND  
 PORT. 2 OF ERF. 3193  
 DURBAN NORTH.**

OWNER: YOUSUF. 082 821 6786.  
**Y. S. MODAN.**

Sheet No: **SHEET 1 OF 2.**  
 Date: 14.03.2019/13.05.2019

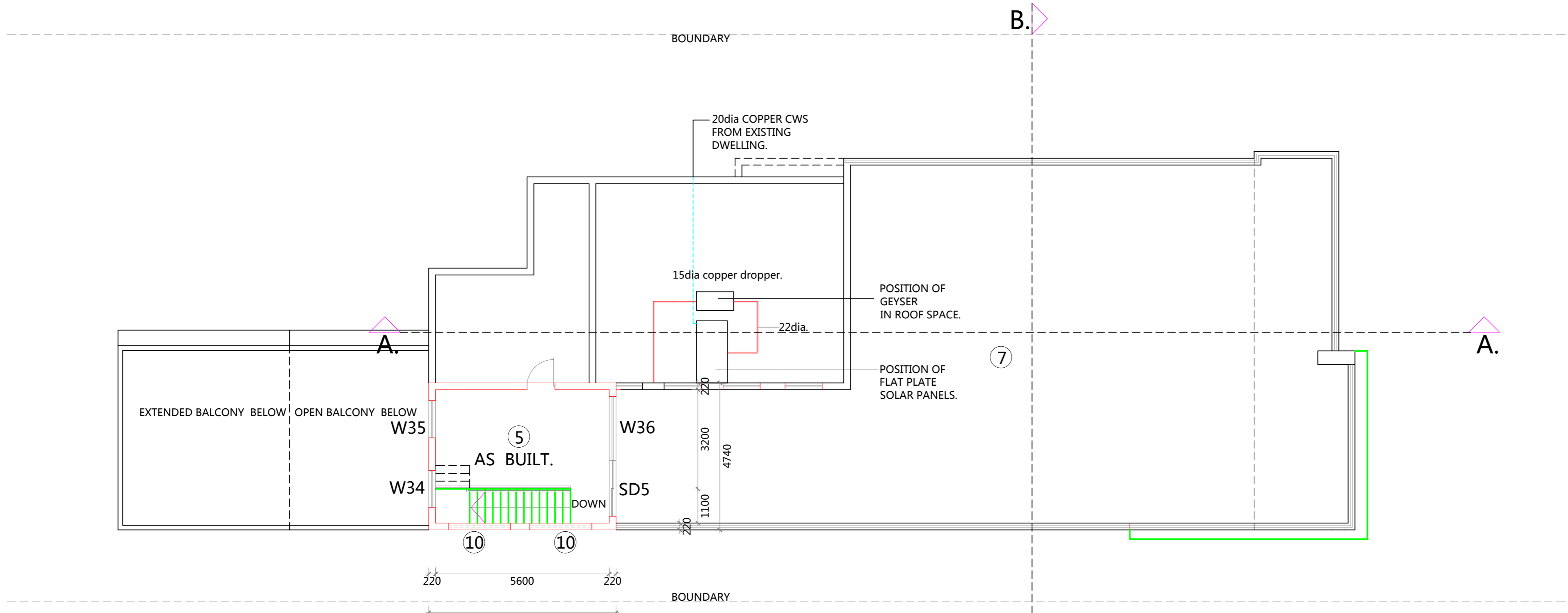
SCHEDULE OF AREAS: m2	
SITE AREA	987.000
PERMITTED COVERAGE 50%	493.500
N/A	
PERMITTED FAR	43.492
DEMOLISHED AREA	56.897
PROPOSED GROUND STOREY	79.411
PROPOSED STAIR WELL	28.630
TOTAL NEW FLOOR AREA	164.938

SCHEDULE OF AREAS. m2.	
SITE AREA (NETT)	987.000
COVERAGE 50%	493.500
EXISTING FLOOR AREA	601.953
PROPOSED FLOOR AREA	136.308
TOTAL FLOOR AREA	738.261
EXISTING COVERAGE	367.773
PROPOSED COVERAGE	56.897
TOTAL COVERAGE	424.670
BALANCE ON COVERAGE	68.830

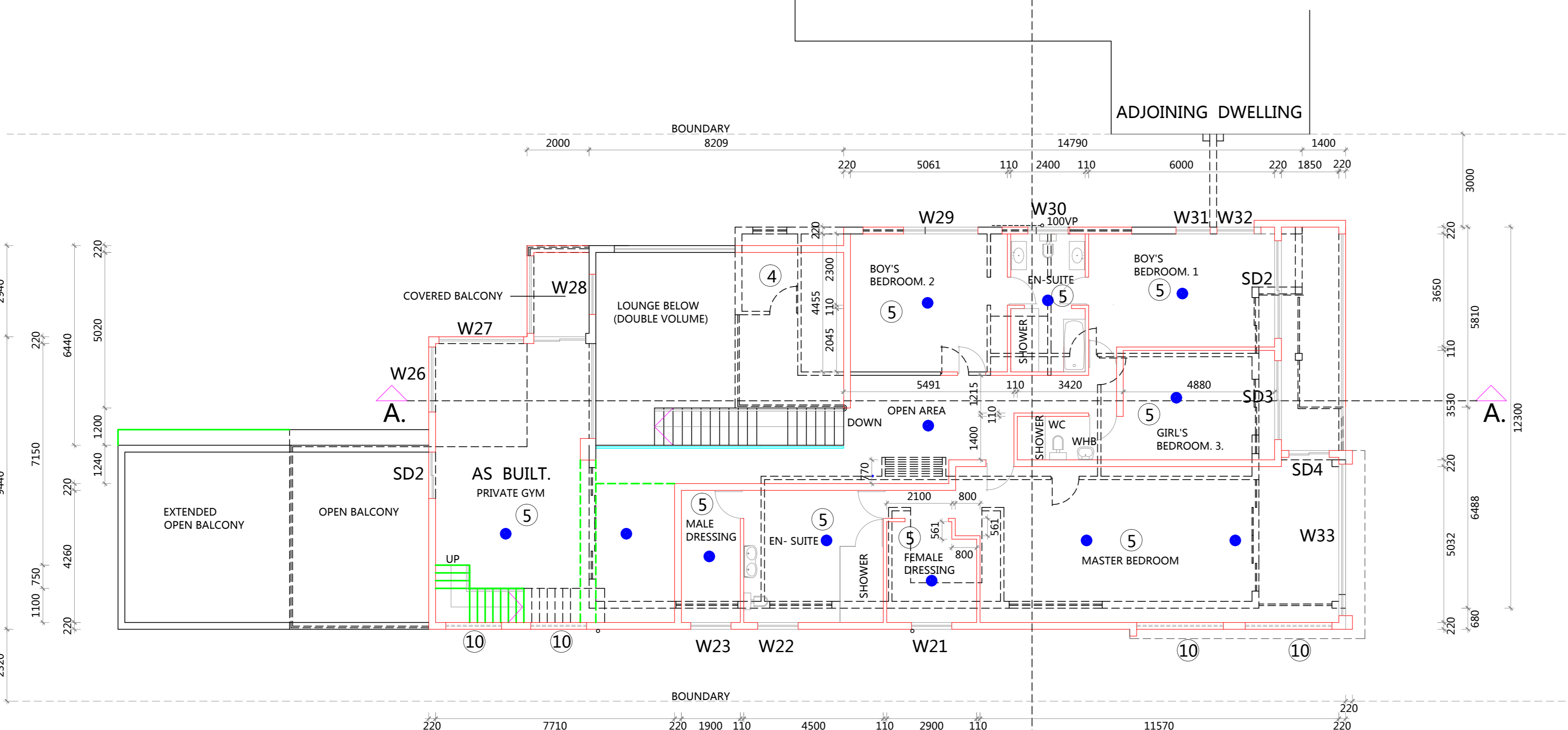
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 Drawn By : M. S. PILLAY  
 Drawing No: 2019/0314

	28dia. COPPER HOT WATER SUPPLY (HWS) WITH MIN. 40mm LAGGING. ISOVER OR EQUALLY APPROVED.
	28dia. COPPER COLD WATER SUPPLY (CWS).
	MIXER - SINGLE LEVER MANUAL CONTROL.

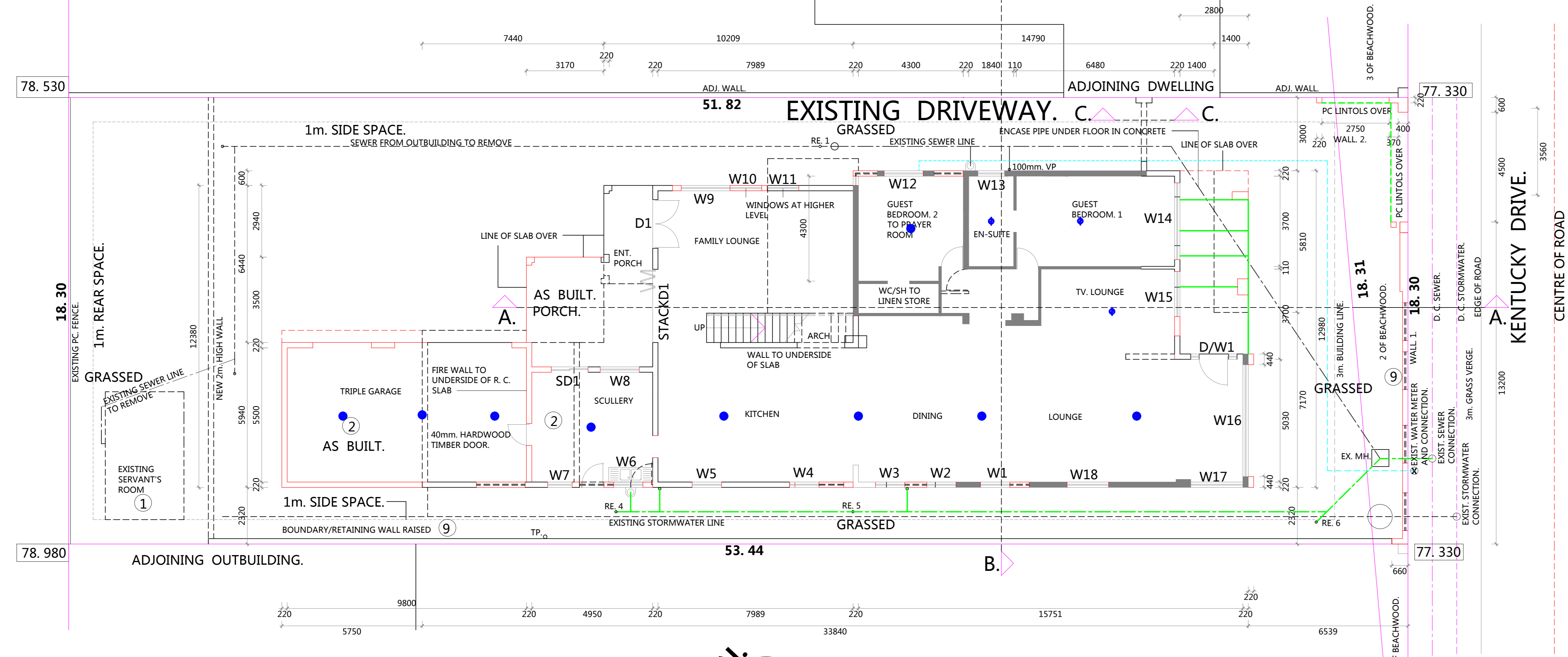
- LIST OF DEVIATIONS:**  
**GROUND STOREY:**  
 ① OUTBUILDING TO DEMOLISH.  
 ② SCULLERY, GARAGES AND PORCH EXTENDED.  
 ③ ALL THE DOORS AND WINDOWS CHANGED.  
**FIRST STOREY:**  
 ④ PART OF ROOM OVER LOUNGE OMITTED.  
 ⑤ ROOM LAYOUT ON FIRST STOREY CHANGED AND EXTENDED TO BE IN LINE WITH EXISTING GROUND STOREY.  
 ⑥ ALL WINDOWS AND SLIDING DOORS CHANGED.  
 ⑦ PART OF ROOF OVER CHANGED TO R. C. SLAB WITH SAFETY RAILS AND PARAPET WALLS.  
 ⑧ NEW STAIR WELL WITH ROOF OVER TO ROOF GARDEN.  
 ⑨ BOUNDARY WALLS INCREASED IN HEIGHT. (S. W. AND S. E. BOUNDARIES).  
 ⑩ WINDOWS TO REMOVE AND BRICK UP ON S. E. ELEVATION.



**AS BUILT ROOF PLAN AND  
 HOT WATER RETICULATION. 1: 100.**



**FIRST STOREY PLAN. 1: 100.**



**GROUND STOREY PLAN  
 AND SITE PLAN. 1: 100.**

