

**SOLID FLOOR INSULATION UNDER SLAB**

- To meet min U value required of 0.22 W/m²K
- Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide a 1200 gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 75mm Kingspan Kooltherm K103.
- 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 65mm sand/cement finishing screed with light mesh reinforcement.
- Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

**FULL FILL CAVITY WALL**

- To achieve minimum U Value of 0.28W/m²K
- 20mm two coat sand/cement render to comply to BS EN 13914-1 with waterproof additive on 100mm block, K value 1.13, e.g. Lafarge Stancrete with fully filled cavity of 100mm Dritherm32 cavity insulation. Inner leaf to be 100mm block K value 1.13, e.g. Lafarge Stancrete. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

**INTERNAL STUD PARTITIONS**

- 100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (e.g. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

**EXTRACT TO KITCHEN**

- Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**EXTRACT FOR SHOWER ROOM**

- Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**BACKGROUND AND PURGE VENTILATION**

- Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²
- Purge ventilation - New windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°
- Internal doors should be provided with a 10mm gap below the door to aid air circulation.
- Ventilation provision to be in accordance with the Domestic Ventilation Compliance Guide.

**WINDOWS**

- Windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K.
- Toughened glazing where applicable (800mm from FFL and to all glazing units within 300mm of doors) in accordance with Build Regs Part K.
- Windows in Shower Room to be obscured.

**DOORS**

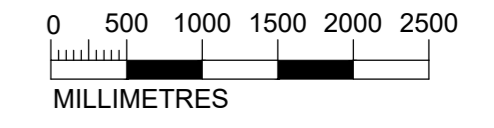
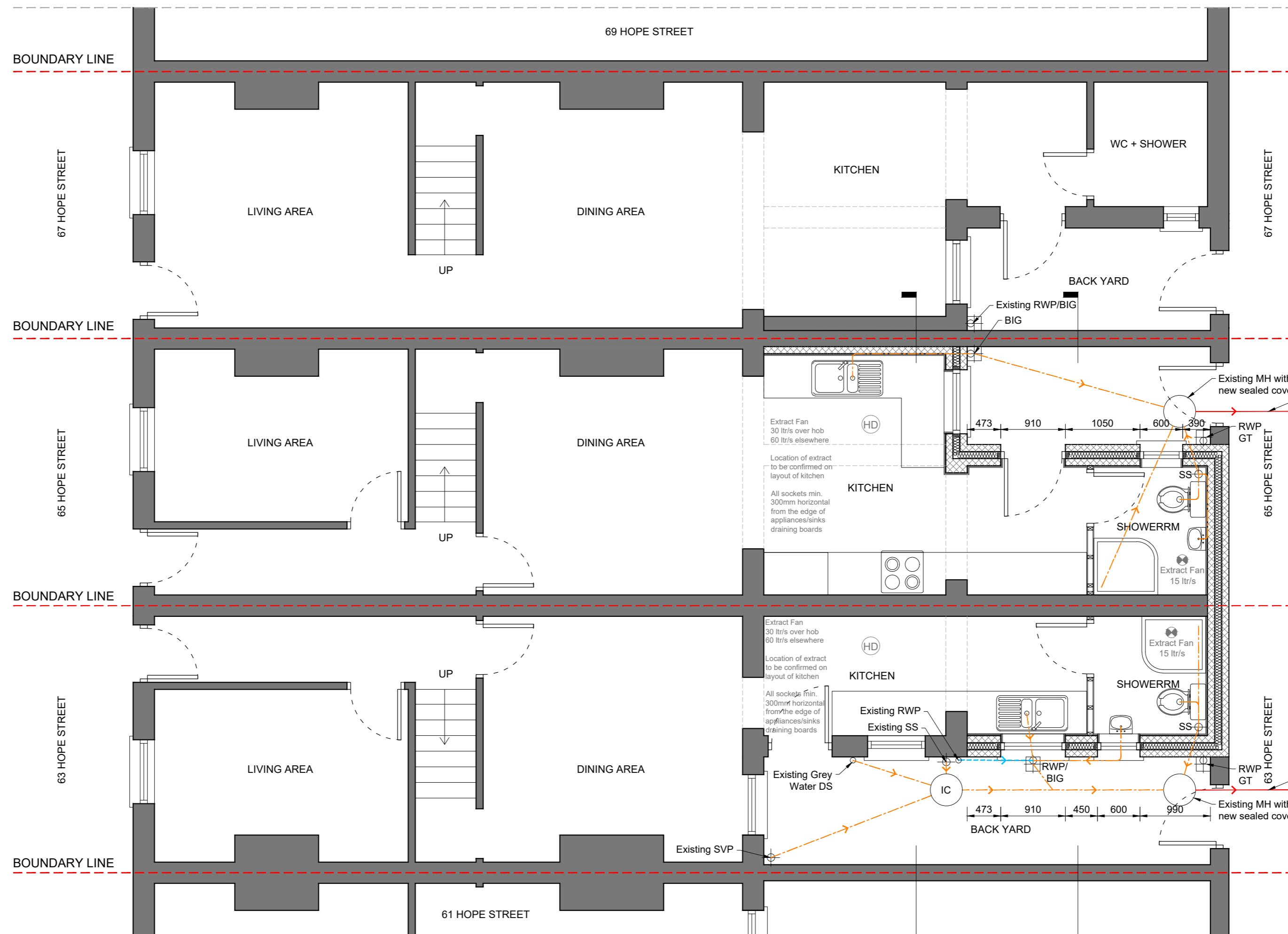
- Doors to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.
- Toughened glazing where applicable (800mm from FFL and to all glazing units within 300mm of doors) in accordance with Build Regs Part K.

**ROOF LIGHTS**

- Min U-value of 1.6 W/m²K.
- Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

**ELECTRICAL**

- All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.



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**LEGEND**

- EXISTING STRUCTURE
- BRICKWORK
- BLOCKWORK
- EXISTING COMBINED DRAINAGE
- PROPOSED COMBINED DRAINAGE
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED SURFACE WATER DRAINAGE
- STRUCTURAL ELEMENT

**1 PROPOSED GROUND FLOOR PLAN**  
Scale 1:50

**RAINWATER DRAINAGE**

- New rainwater goods to be new 110mm UPVC half round gutters (black, to match existing) taken and connected into 68mm dia UPVC downpipes (black, to match existing).

**INSPECTION CHAMBERS**

- Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers in buildings and be adequate for vehicle loads in driveways.

**ABOVE GROUND DRAINAGE**

- All new above ground drainage and plumbing to comply with BS EN 12056-2 for sanitary pipework. All drainage to be in accordance with part H of the

Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

- Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)
- Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe
- Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
- W/c - 6m for 100mm pipe for single WC
- All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.
- Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.

- Waste pipes not to connect within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

**AUTOMATIC AIR VALVE**

- Ground floor fittings from wc to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

**SOIL AND VENT PIPE**

- Svp to be extended up in 110mm dia UPVC and to terminate min 900mm above any openings within 3m. Provide a long radius bend at foot of SVP.

Rev.	Date	Notes	Init.
A	19/08/21	PRELIMINARY ISSUE	TV

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Drawing Title:  
**PROPOSED GROUND FLOOR PLAN**

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