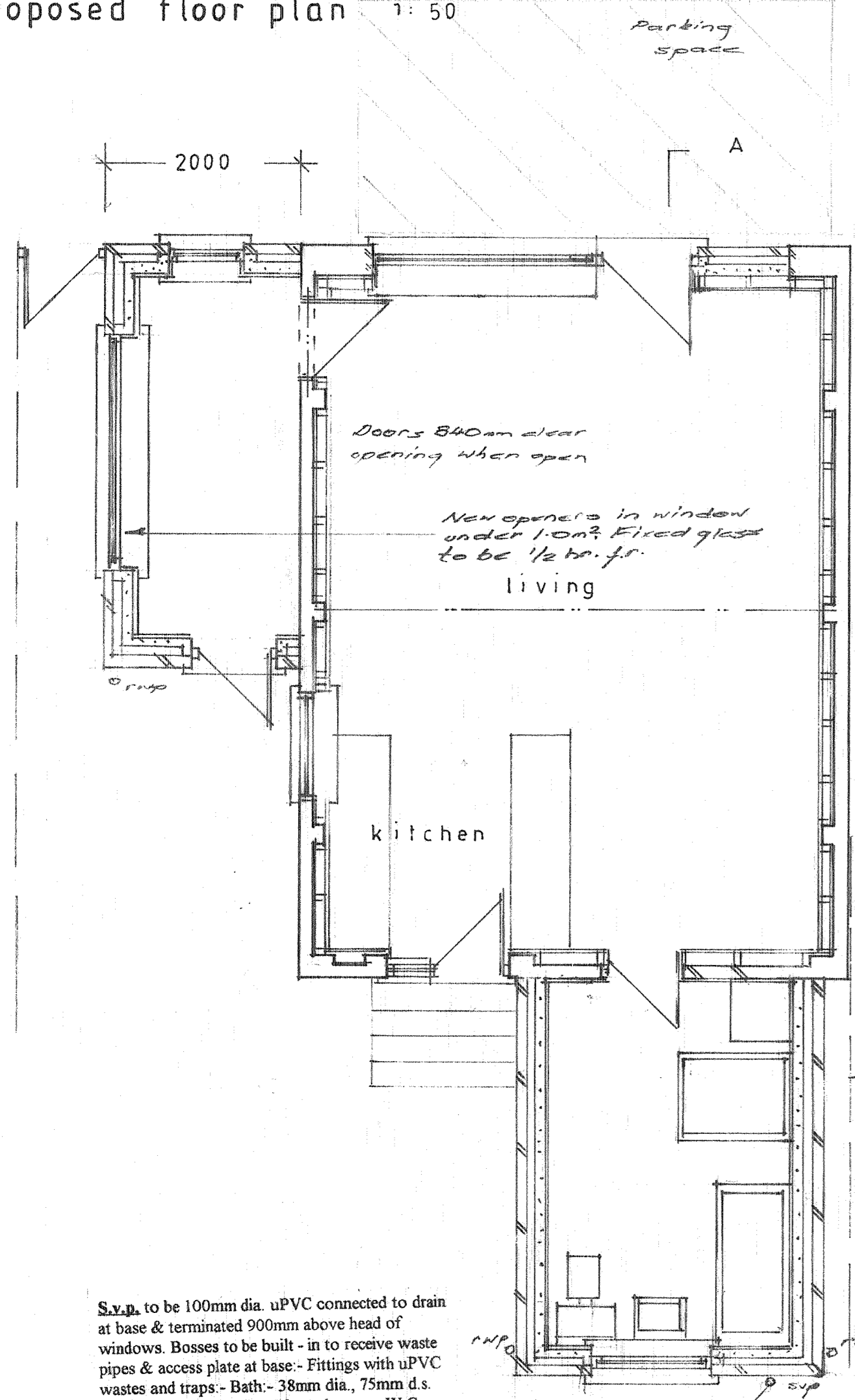


Proposed floor plan 1:50



S.w.d. to be 100mm dia. uPVC connected to drain at base & terminated 900mm above head of windows. Bosses to be built in to receive waste pipes & access plate at base. Fittings with uPVC wastes and traps. Bath - 38mm dia., 75mm d.s. trap. Basin - 32mm dia., 75mm d.s. trap. W.C. - 100mm dia., 'p' trap. Rodding eyes at all changes of direction. Centre line of WC connection min 200mm below centre line of bath or shower waste.

New Drains to be of 100mm dia. Super sleeve, laid to 1 in 40 falls & run as shown, with 150mm thick pea-shingle bedding.

Allow to dig trial hole and expose existing foundations for inspection by BCO. Where required, allow to underpin foundations as instructed by BCO. To existing walls remove all existing fittings and paint with 2 no. coats of Synthaprufe. Expose existing floor DPM and slap for inspection by BCO. If required, allow to form new DPM to floor using 3 no. coats of Synthaprufe painted onto existing concrete slab and connect to new waterproofing to walls. Expose all lintels over openings in existing walls for inspection. Over existing slab lay Celotex insulation with 65mm thick 1:3 cement/sand screed with chicken wire reinforcement. Internally to perimeters of existing walls, form new stud walls with 50 x 100mm studs at 400mm c/s with 100mm thick Celotex Tuff R GA3000 between studs and 22mm Gyproc Thermo line basic LD face of studs.

**Windows and Doors** to be double-glazed uPVC framed units with draught strip to all openers. Glazing to be in safety glass where appropriate and locks on all openers and doors. Sealed units to have overall width of 28mm with min. 20mm Argon filled gap and Low-E aluminium soft coated glass. Average U values to be 1.2W/m<sup>2</sup>K for windows and 1.0W/m<sup>2</sup> for doors. Background vents to be min. 1.75m<sup>2</sup> all. Habitable rooms and Kitchen windows to have min. width 450mm escape casement with min. o/a area of 0.33sq M. Vent to Bedroom to be min. 8000mm sq and to Bathrooms 4000mm sq.

**Cavity Walls - Full Fill:** - To achieve minimum 'U' value of 0.28W/m<sup>2</sup>K. Provide 103mm facing brick to match existing construction. 100mm cavity with 90mm Celotex Thermo class 21 insulation & 100mm lightweight block K value 0.11. Internal finish 13mm lightweight plasterboard on dabs. Walls to be built with 1:1.6 cement mortar. Wall ties to be at 450mm vertical centres. Cavity to be carried min. 225mm below DPC.

**Movement Joints** to be formed of Flexed or similar boarding with masonry either side tied together with flexible ties, joint to be masked internally and with a waterproof mastic sealant externally. Joints to be min. 1mm thickness per metre run + 30%.

**Insulated stud wall** - lining existing structure to be of 50 x 100mm s.w. studs at 400mm c/s with 100 x 50mm sole of head plates & noggins. Walls insulated with 110mm Kooltherm 107 between studs & 32.5mm Kooltherm 118 with 3mm skim. Electrical cabling in walls set in conduits.

**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 BS 7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a Part P Certificate will be given to the Council.

**Ventilation** to rooms as follows:- Habitable Rooms:- 10,000 sq mm background ventilation. Kitchens:- 4000 sq mm back. vent & ext. fan to extract 60 litres/sec. Bathrooms:- Ext. fan 15 litres/sec. 10mm gap left under bathroom door. W.C.:0 Ext. fan 3 air changes/hour & 15 min. over-run, light switch operated. Utility room 30 litres/sec. extraction. All fans ducted to external air.

**Lighting:** to new rooms to be provided with min. 1 no. light fitting with luminous efficacy of n.l.t. 40 lumens / circuit watt. 1 fitting / 25m<sup>2</sup> & 75% of fittings to be low energy.

Trussed rafters to form new pitched roof and All installed to manufacturers instructions. Design calculations to be submitted to BCO for approval prior to manufacture.

**Pitched Roof** to be of s.w. timber to sizes and centres shown & all framed together. Rafters & c/g joists to be strapped to walls & plates with 30 x 6 x 900mm galv. m.s. straps at 1200mm c/s, plugged and screwed to walls. Slope covered in Tyvek breathable roofing felt with s.w. battens at gauge to suit tiles. Tiles nailed & verges bedded in cm code 4 lead flashings at abutments. Ceiling of 500 gauge polythene v.b. stapled to joists & c/g of 9.5mm plasterboard, taped & skimmed. Rollbat insulation to 'cold roof', 100mm between rafters & 200mm overall.

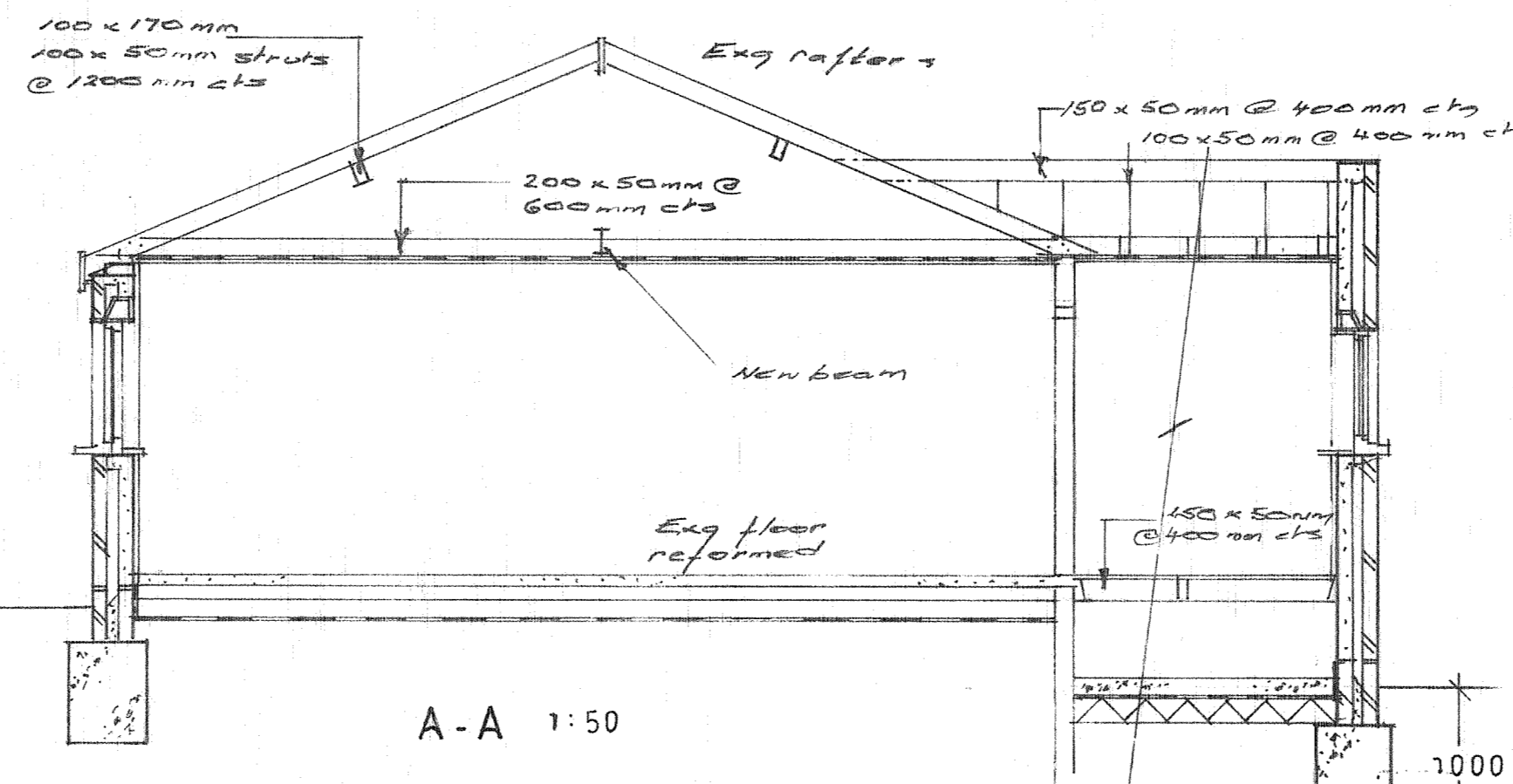
**Valley Gutter** formed of non-bituminous felt underlay on lay boards with Code 5 lead valley lining in max. 1500mm. Layboards to be 25mm thick external ply with linings carried 450mm up under tiling on the sides.

**Rainwater Disposal** by means of 100mm dia. uPVC gutters fixed to falls to fascias with stop-ends & outlet to 63mm dia. r.w.p., connected at base to b.g. & run via drain to new brick stn S/A min. 5m from buildings.

New beams formed of RSJ's to sizes shown & bolted together with 8mm bolts at 600mm c/s with gas barrel spacers. All encased in 2 no. layers 9.5mm plasterboard, fixed to break joint with 1.6mm tying wire at 100mm pitch. All taped & skimmed. 50 x 50mm s.w. cradle formed to fix cladding.

**Suspended timber first floor** of s.w. timbers at centres shown hung in galv. m.s. hangers on walls & strapped with 30 x 6 x 1200mm galv. m.s. straps, plugged and screwed to walls & solid strutting as shown. Floor deck of 25mm thick flooring grade chipboard & 200mm thick m.f.a. between joists. 12.5mm plasterboard taped & skimmed.

**Foundations** to be formed to sizes & depths shown & agreed on-site with B.C.O. to suit prevailing soil conditions. All in 1:2.4 conc.



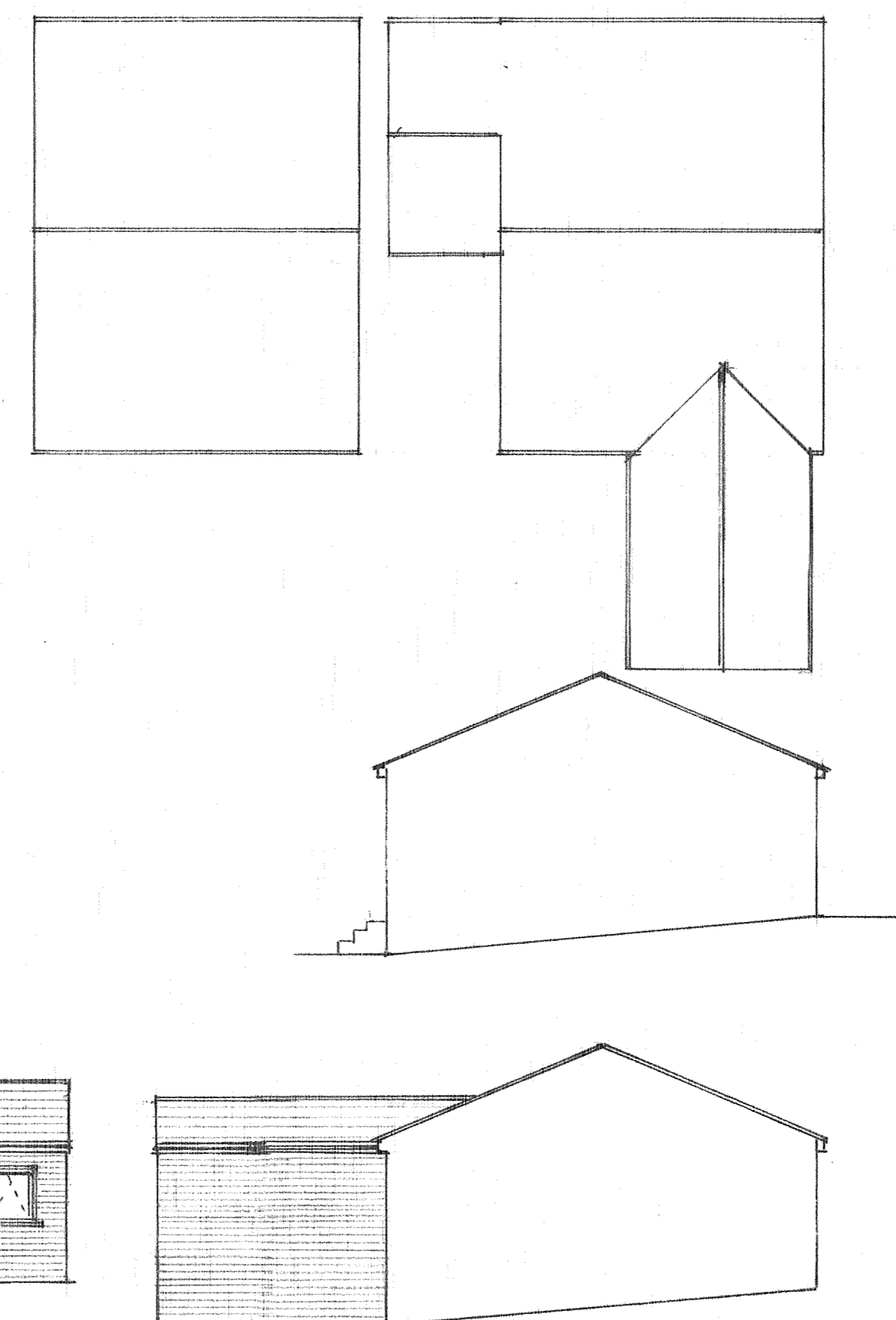
**Smoke Detection:** Mains operated linked smoke alarm detection system to BS 5446 - 1:2000 and BS 5839 - 6:2004 to at least a Grade D category LD3 standard and to be mains powered with battery back-up. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/stoys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen. Heat detector to be activated at temperature of 58°C. Upon completion Certificate of Installation to be provided to B.C.O.

Exg. central heating system to be extended into extension with pressed steel radiators, TRV's & insulated pipework. If boiler position to be changed new positioning to be decided by Gas Safe registered engineer.

**New Solid Floor** formed of min. 150mm thick, well rammed, broken brick hardcore, blinded with 50mm sand. 100mm thick 1:2.4 conc. slab. Marley 'Dampseal' DPM connected to exg. & new DPC's min. 1200g 100mm dia. PVC air-ducts built in as necessary to vent. exg. timber floor. Floor to have 100mm Kingspan K103 PIR insulation & 65mm 1:4 c.s. screed. Perimeter insulation upstands & separating membrane.

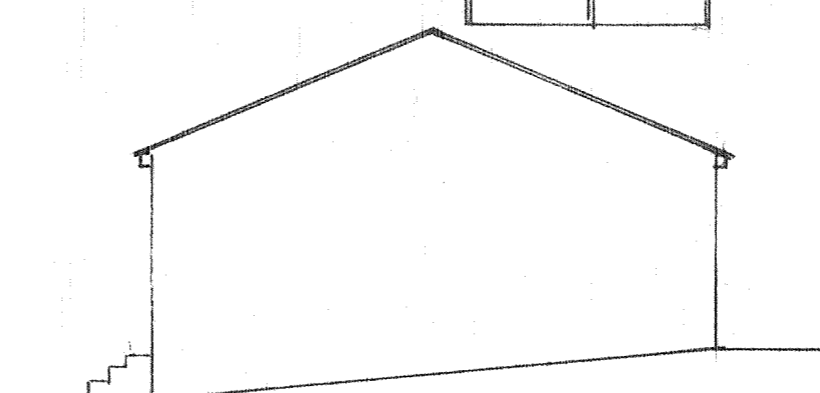
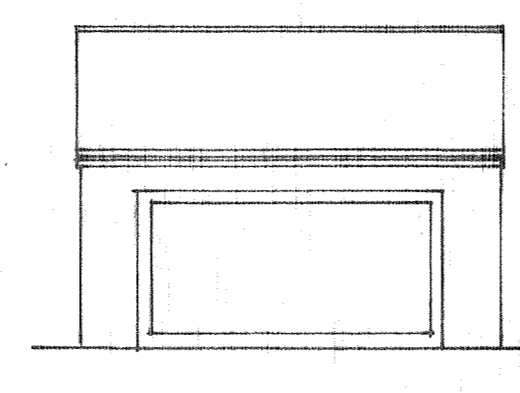
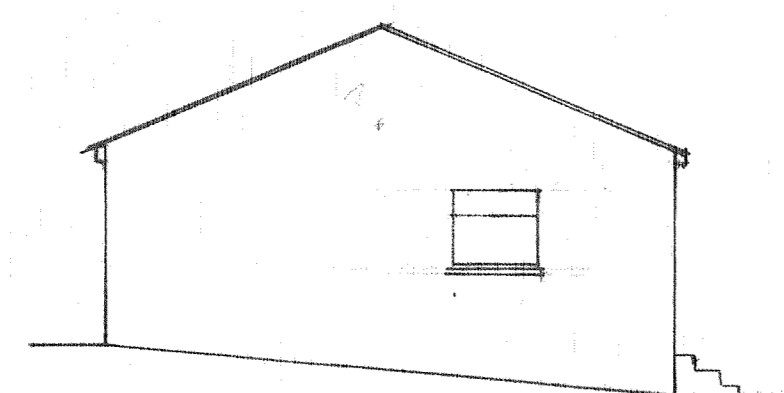
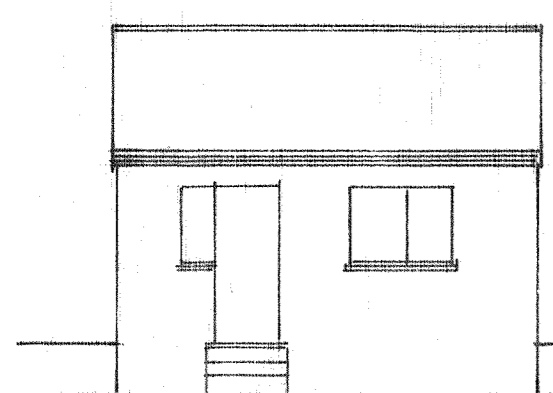
Roof plans

Existing Proposed

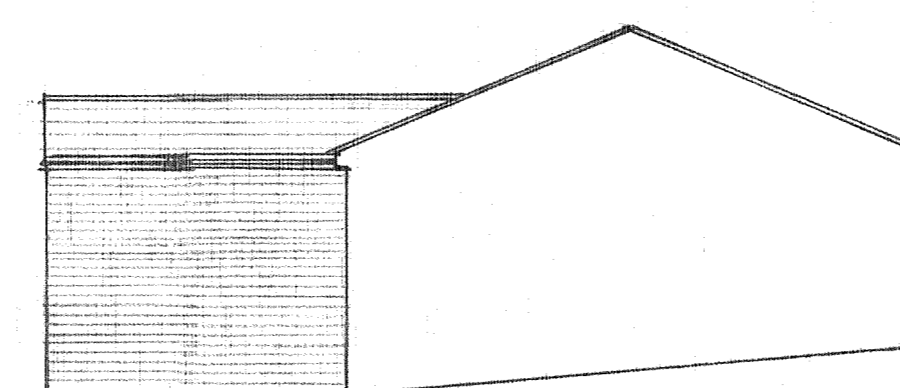
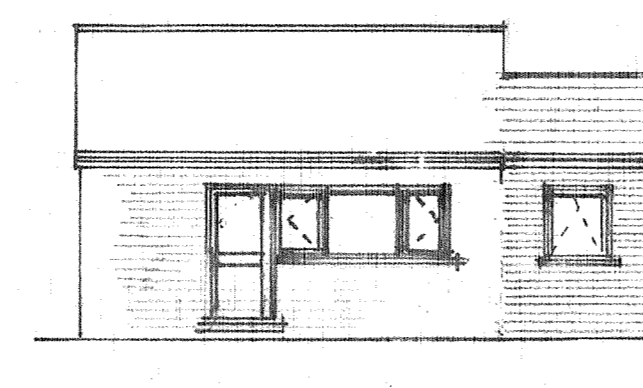
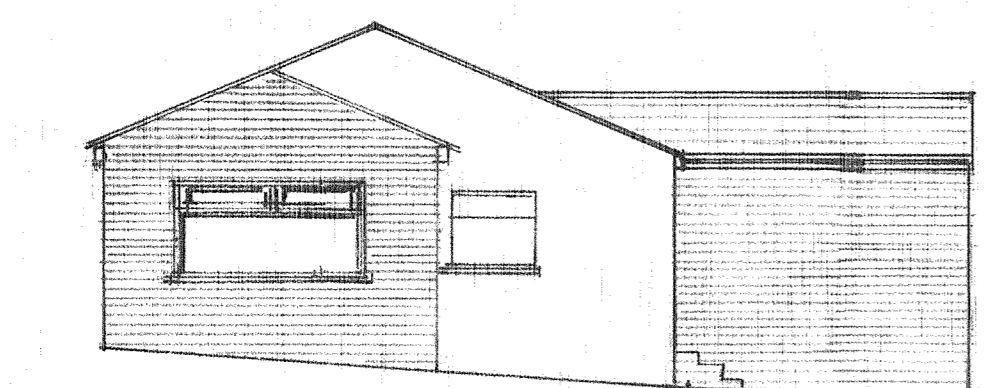
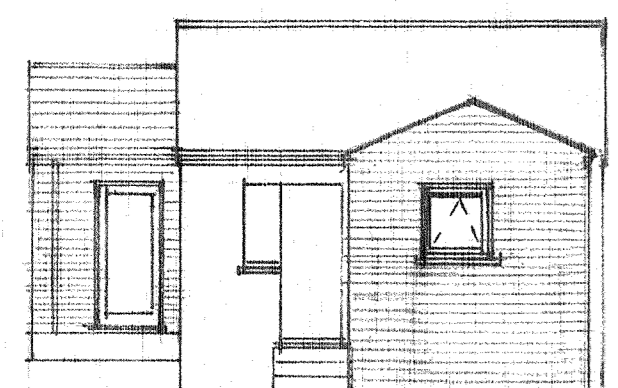


Elevations 1:100

Existing



Proposed



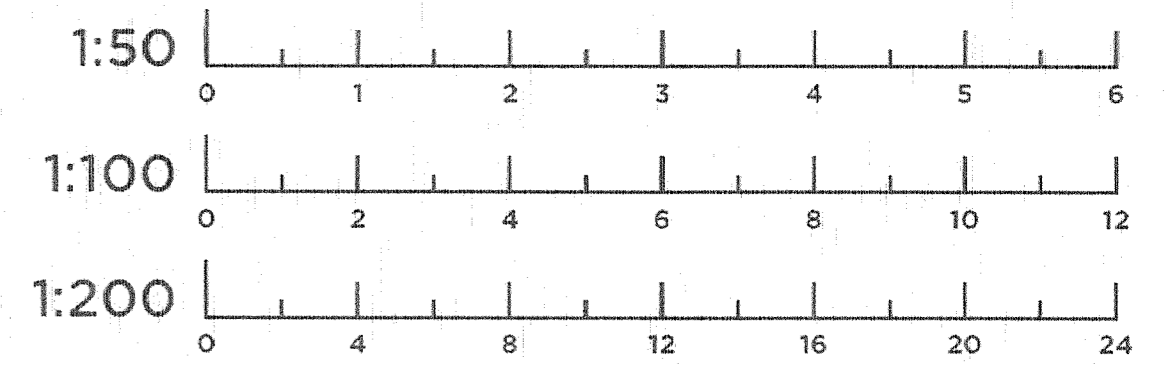
Front

Flank

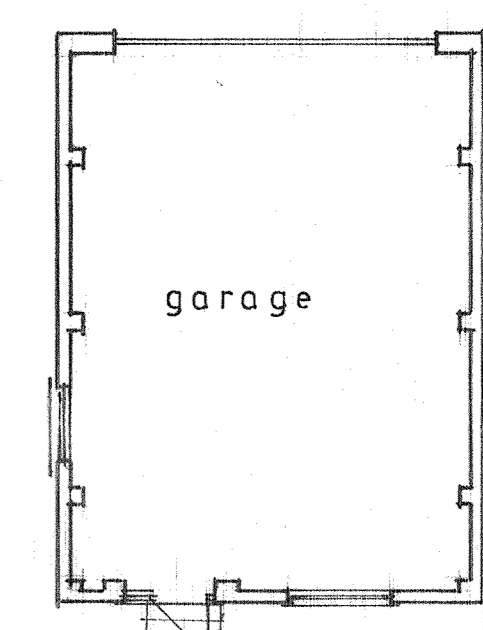
Rear

Side

Scale Bars (m)

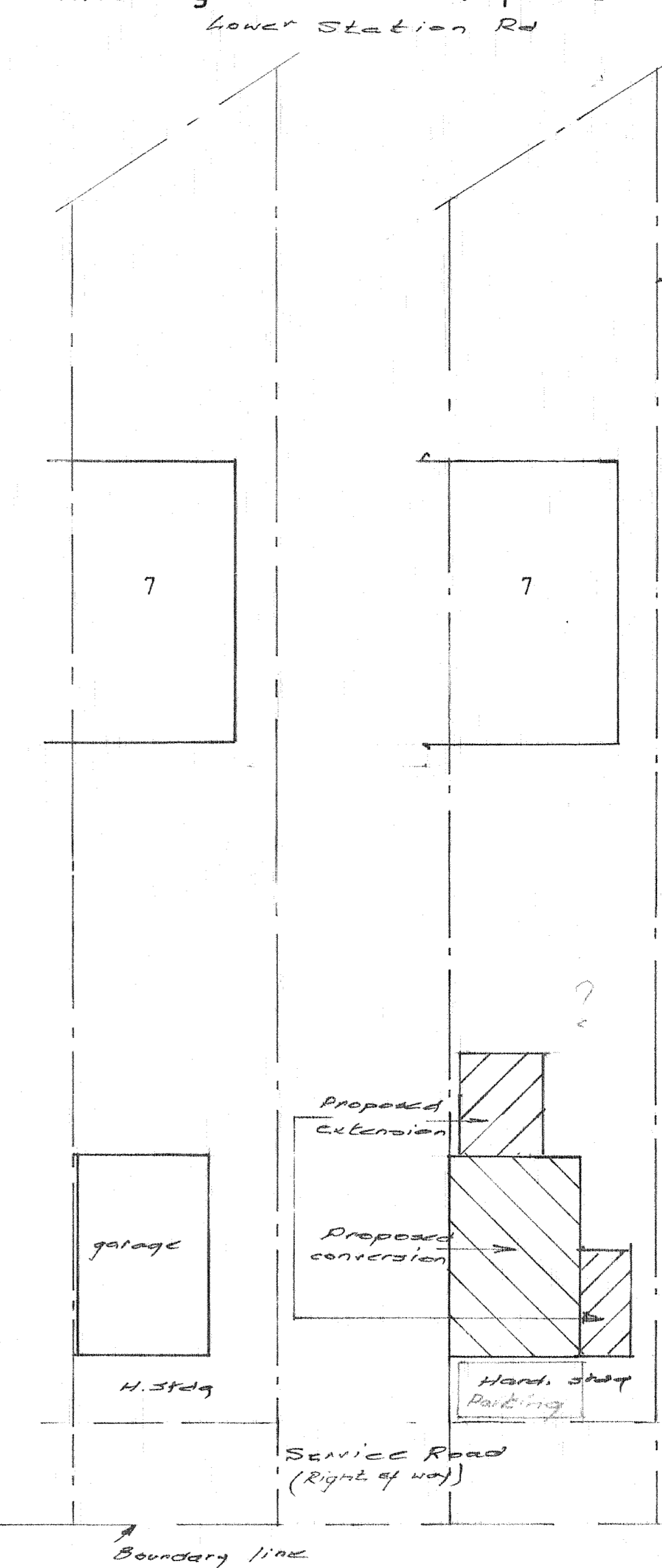


Existing floor plan 1:100



Block plans 1:200

Existing Proposed



Prior to commencement of work contractor and client to confirm exact boundary positions. Contractor to inform architect of any anomalies between plans and elevations/section prior to start of work. Any key elements of the existing structure such as foundations and/or lintels, which by virtue of the proposed works, will be accepting greater loadings will need to be exposed for consideration by the building control surveyor and upgraded or replaced if found necessary. All measurements are to be checked on site prior to ordering any materials. The Party Wall Act 1996 must be adhered to wherever relevant. It is the client's responsibility to seek expert advice from a professional party wall surveyor to ensure full compliance with the regulations. Water board agreement must be provided in writing when necessary, prior to commencement of works. Heating, lighting and internal finishes are to be agreed between the owner and chosen builder. All structural timber members are to be grade c24 treated softwood marked KD (kiln dried) or dry to ensure the timbers have been properly stored. All leadwork should be fixed and installed in accordance with the Lead Development Associations Handbook - 'Lead Sheet Building - A Guide to Good Practice'.

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Drawing Title  
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garage to residential  
accommodation

Scale 1:50 1:100 1:200