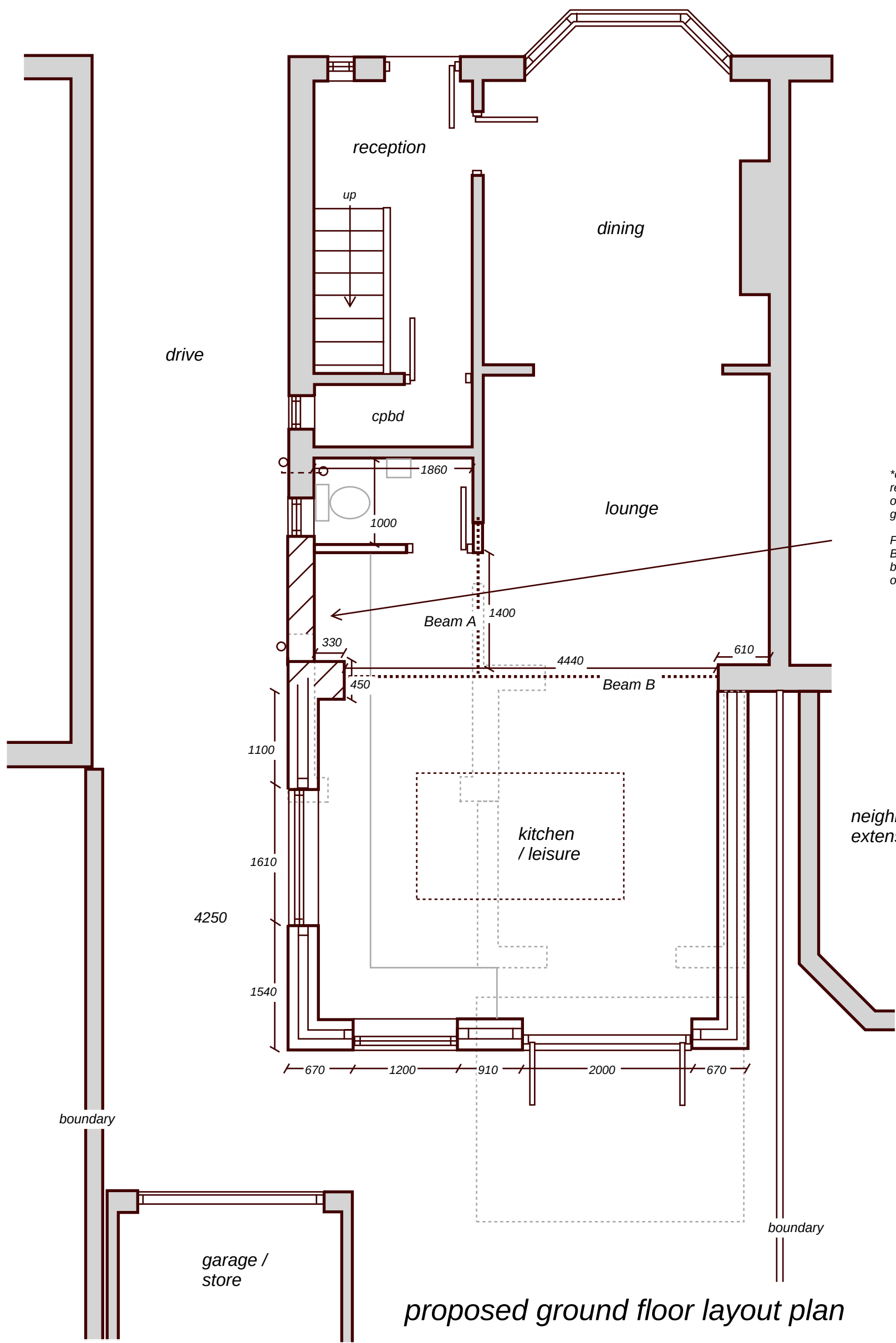
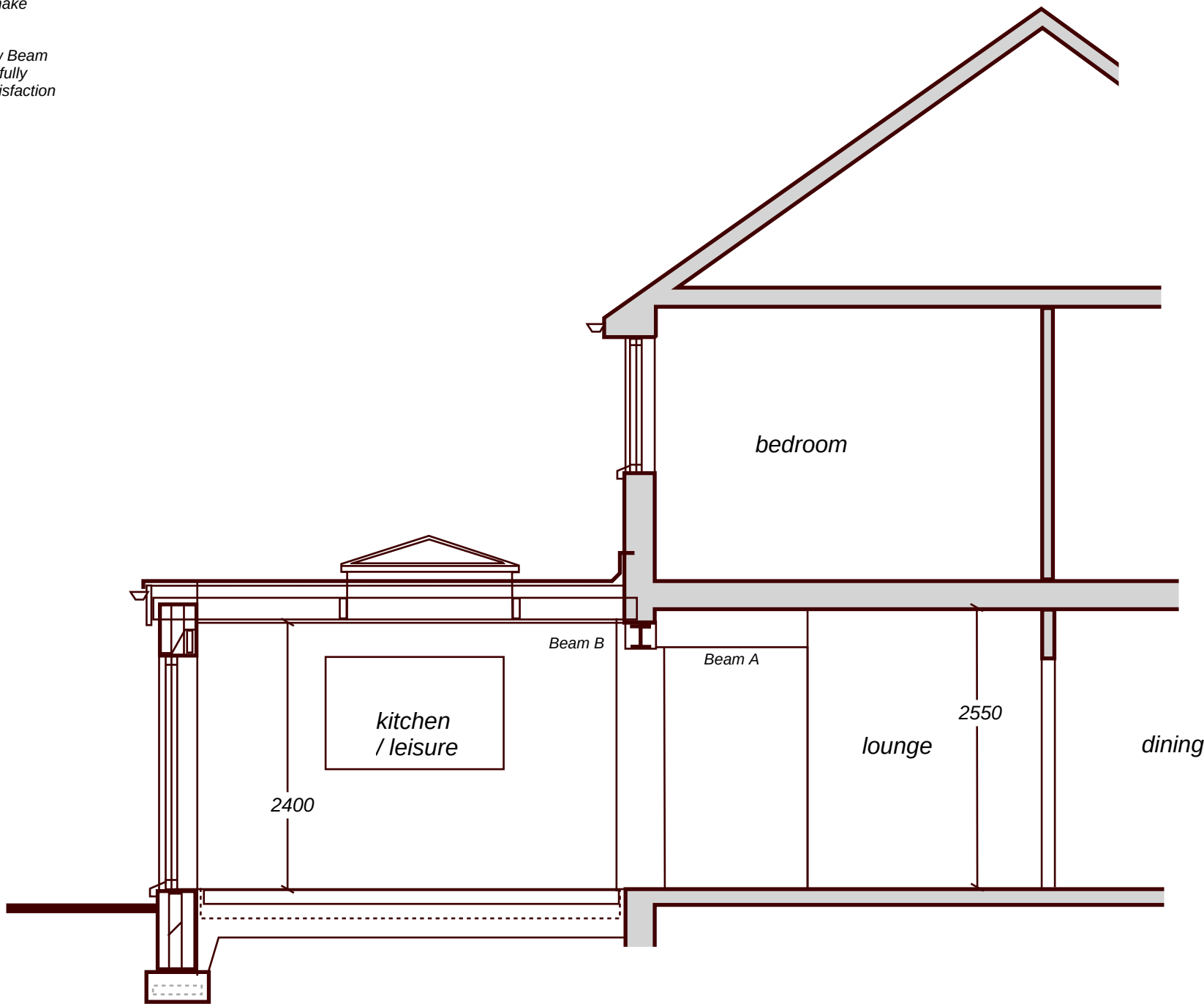




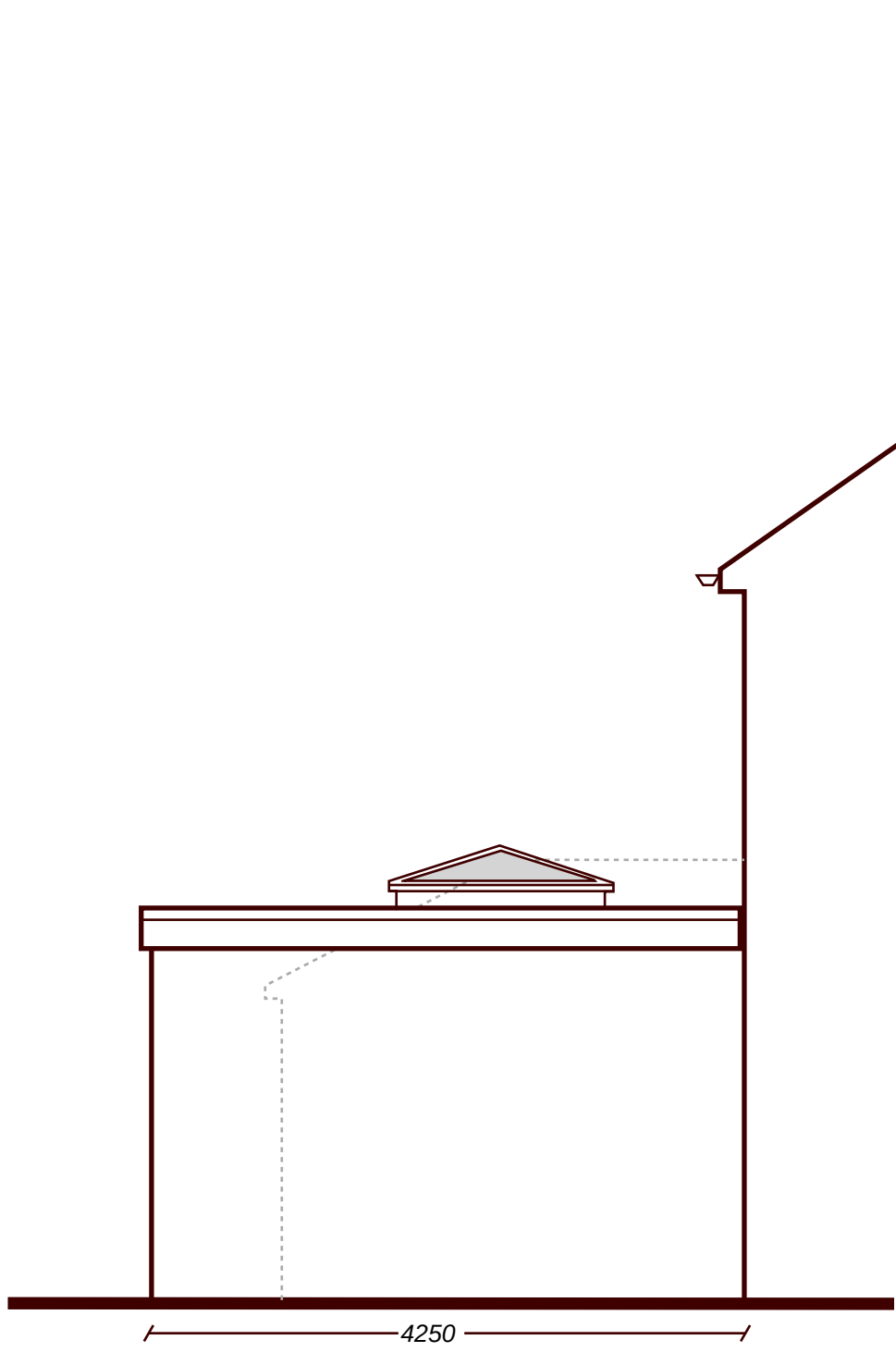
proposed ground floor layout plan



proposed rear elevation



proposed section view



proposed side elevation to boundary



proposed side elevation to drive

***Important Note:**
This drawing has been prepared for submission to the Inspecting Authorities for necessary Statutory Approvals. Nominated contractor to verify all dimensions either written or scaled together with drainage lines and inverts etc. prior to commencement of formal construction work on this site and any discrepancies to be referred to the Client and Agent. All works to be carried out with full agreement of client and adjoining neighbour and any disturbance to existing structures to be made good to satisfaction of all parties.
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***Structural Works:**

Install steel beams encased in gyproc fire line board to achieve min. 30 minutes fire resistance. See Engineer's design sheets for all structural beam information including pad stone sizes etc.

*Beam schedule (All steel grade S355)

Beam A - 152 x 89 x 16 UB (with bolted angle connection to Beam B)

Beam B - 203 x 203 x 52 UC (with 270x8mm steel spreader plate welded to top flange)

*Note Contractor to assess bearing capacity of existing retained masonry to receive ends of new Beams and if necessary rebuild in bonded 7N/mm² engineering quality concrete brick/ block to required bearing capacity beneath spreader pad stones to full satisfaction of inspecting authority.

****General Specification:**

***Preliminary Works:**

Carefully demolish existing single storey outbuilding at rear and prepare existing rear patio area to accommodate extension footprint.
Plan extension programme to ensure minimum disturbance and exposure to rear living space. remove all rubble from site to approved tip facility. Expose existing house foundation to assess type of base and ground conditions prior to commencement of construction works. Any variance from the strip foundation specified below to be referred to a specialist engineer for redesign.
Examine and expose as necessary existing drainage lines and inverts etc to assess location and prepare for extension excavation work.

***Walls (External):**

Selected faced brick external leaf to match existing property with min 100mm cavity enclosing Dritherm 32 insulation fill to manufacturer specification and internal leaf of approved 100mm load bearing thermal block work (maximum 0.15W/m²k) faced internally with 52.2mm PIR plasterboard finish (40mm PIR+12.5mm plasterboard) on treated battens or cement dabs. This or similar construction to achieve max 0.18W/m² k U-Value
Install Thermabate or similar insulated cavity closures at all opening jamps.
*Note: new walling to be effectively bonded to existing structure to satisfaction of inspecting authority surveyor and wall ties to be stainless steel suitable for 100mm cavity width and compliant with DD140. set at 5 per m² and at each block course at jamps.

***Internal Walls (non load bearing):**

100x47 sw timber stud faced on 100x75mm sole plate and dpc faced with plasterboard incorporating vapour check and enclosing 100mm rockwool acoustic grade insulation.

***Foundation Detail:**

Subject to prior exposure of existing house foundation lay 600x300mm deep concrete strip foundations to new walls at depth to suit site conditions and to satisfactory bearing strata to approval of inspecting authority. Reinforce throughout with 2 no layers B503 steel mesh.

*New foundation to create no surcharge on drainage lines at any point.

All works to be carried out with full agreement of client and adjoining neighbours and any disturbance to existing structures to be made good to satisfaction of all parties.

***Ground Floor Slab:**

Extension floor slab to comprise floor finish to client requirement on min 60mm screed or power float finish to 100mm concrete slab with one layer of A193 mesh reinforcement on 1200g dpm over Celotex GA 4000 (100mm) or similar approved insulation board turned up in 25mm thickness at floor perimeter to avoid cold bridge. Lay further dpm over well blinded 150mm min. compacted natural stone sulphate free hardcore. *U-Value max 0.18W/m²k

***Flat Roof:**

Approved AA rated single ply membrane by specialist contractor on min 18mm ext ply deck over Celotex GA4000 (150mm) or similar approved insulation board and composite deck incorporating vapour control layer and bonded 5mm deck ply face. Ensure all joints are tight with vapour sealant to manufacturer spec. Secure TD4000 with helical fixings to correct spec. and lay to fall 1:60 across 195x47mm sw C24 joists at 450mm max centres built in to walls to 90mm and bearings or supported off heavy duty steel joist hangers to manufacturer spec. Form aperture to receive lantern frames with double 195x75mm C24 grade trimmer arrangement bolted together with dog tooth washers at 600mm centres. Joists to be anchored to external supporting walls with galvanised ms straps at 1500mm max centres.
*This or similar construction to achieve max 0.15W/m²k U-Value

***Lintels:**

Install Catnic or similar combined steel lintels over new door and window openings with minimum 150mm end bearings to manufacturer spec.

***Drainage:**

Lay new 100mm pvc drains on granular bed at min 1:40 falls to connect to existing system on site.
Ensure adequate support and protection to all drains passing through walls and building footprint.
UPVC rainwater goods to match existing carried to existing system as required.
Internal waste plumbing to satisfy BS5572 with 75mm deep seal traps as required. Wastes to discharge to 100mm stub stack fitted with Durgo or similar air admittance valve positioned above flood level of fittings to full satisfaction of inspecting authority surveyor. Make branch connection to existing external soil and vent pipe to satisfaction of inspecting authority surveyor.

***Fenestration:**

Install high performance double glazed windows and combination doors as shown and to client requirements with max 1.40 w/m² k U-Value
Total window and door opening casements to represent minimum 5% of new floor area + adjacent kitchen etc. floor area as natural vent plus min 800mm² trickle ventilators to head of frames.
Ensure that all doors and critical window areas are fitted with laminated or toughened safety glazing compliant with current BS:EN 12150.
*Install double hip type lantern light (2000x1200mm) in aluminium frame by specialists to client requirements with thermally broken frame arrangement and double glazed safety glass as general spec. above. Form aperture to receive lantern frames with C24 grade timber trimmer arrangement as specified in roof detail above. Follow manufacturer spec. for installation and weathering to up-stand from roof membrane.

***Heating:**

Any extended space heating to be to the full requirements of a suitably qualified heating engineer and assessment of existing heating system plus compliant with current Part J Building Regulations. Install thermostatic control valves as necessary throughout.

***Electrical Work:**

All notifiable electrical work to be carried out by a suitably qualified contractor registered with an approved national body. A formal completion certificate to be issued in compliance with current Part P building regulations and to satisfaction of inspecting authority surveyor
Note: all new lighting to be low energy type to client spec.

***Ventilation:**

Natural ventilation from opening casements as above plus install mechanical extract fan to wc set to achieve min 6 litres/sec extract rate.
Similarly install mechanical extract fan to kitchen area set to achieve min 60 litres/sec extract rate (30 litres/sec if over cooker hood).

*carefully remove existing window from kitchen and reposition to extension as shown. Brick up original opening after installing new wc window and make good to all surfaces.