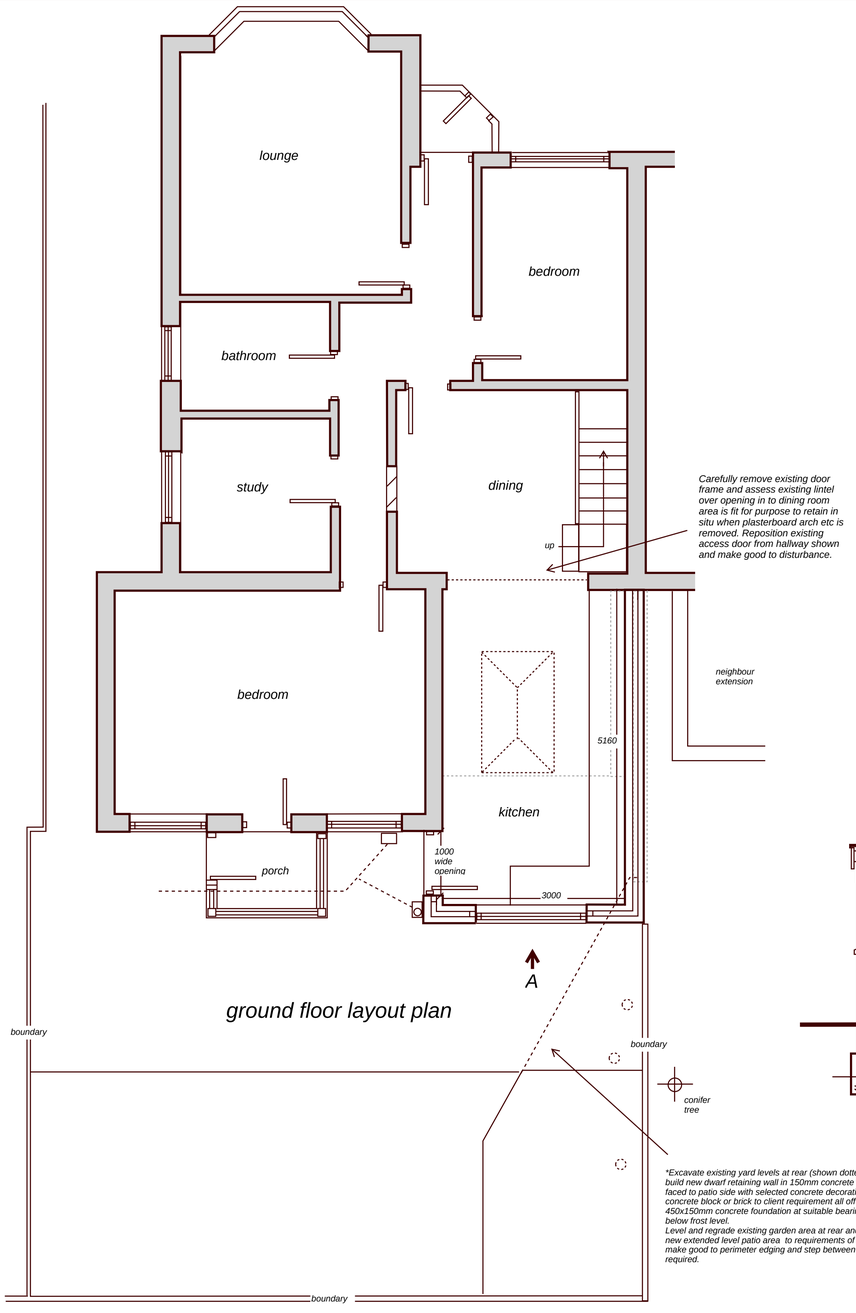
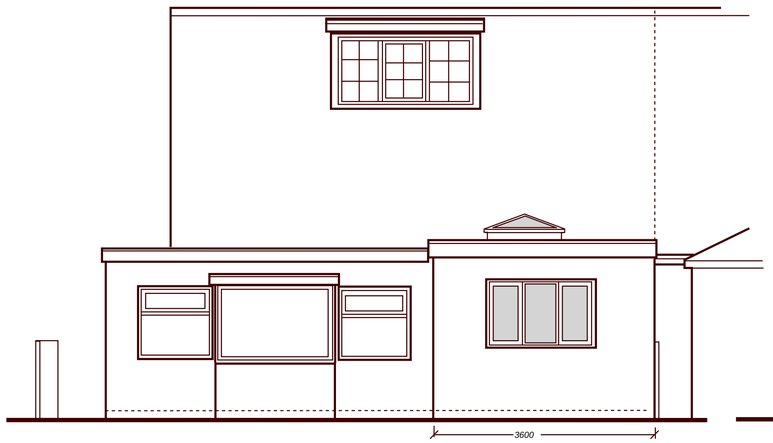


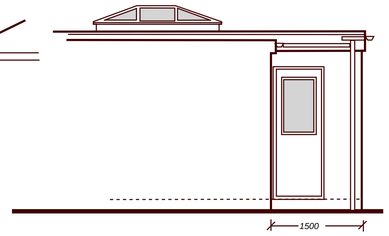
ground floor layout plan

*Carefully remove existing door frame and assess existing lintel over opening in to dining room area is fit for purpose to retain in situ when plasterboard arch etc is removed. Reposition existing access door from hallway shown and make good to disturbance.

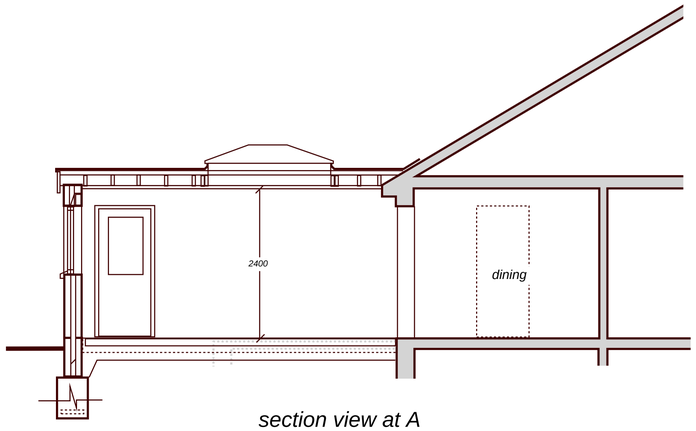
*Excavate existing yard levels at rear (shown dotted) and build new dwarf retaining wall in 150mm concrete blockwork faced to patio side with selected concrete decorative concrete block or brick to client requirement all off 450x150mm concrete foundation at suitable bearing strata below frost level.
Level and regrade existing garden area at rear and install new extended level patio area to requirements of client and make good to perimeter edging and step between levels as required.



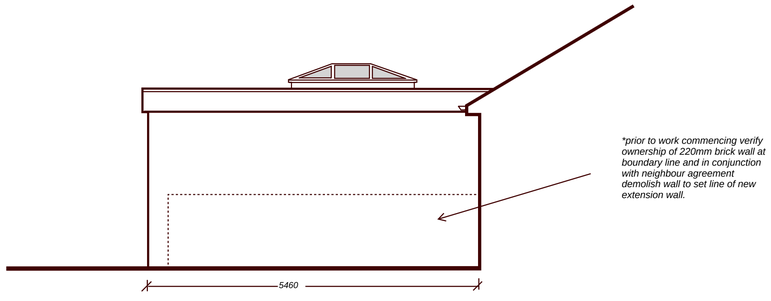
rear elevation



side elevation at rear



section view at A



side elevation at rear boundary

*prior to work commencing verify ownership of 220mm brick wall at boundary line and in conjunction with neighbour agreement demolish wall to set line of new extension wall.

*Important Note:
This drawing has been prepared for submission to the local authority 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 neighbours and any disturbance to existing structures to be made good to satisfaction of all parties.

*General specification

*Preliminary Works
Prepare existing conservatory for demolition and to accommodate extension footprint.
Examine condition of floor including damp proof membrane and hardcore fill to assess if fit for purpose to retain.
Ascertain true boundary line and ownership of existing 220mm brick boundary wall in liaison with neighbour.
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 building work.
Examine and expose as necessary existing drainage lines and inverts etc to assess location and prepare for extension excavation work.

*Walls (External):
Selected faced brickwork to match existing, min 100mm cavity enclosing Dritherm 32 insulation fill to manufacturer specification and internal leaf of 100mm load bearing thermal blockwork (eg: Celcon Solar) faced internally with plasterboard on treated battens or cement dabs.
Cavity walls to be closed at periphery with Thermabate or similar approved cavity closures to avoid cold bridging.
This or similar construction to achieve max 0.28 w/m2 k U-Value
*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.
*Install catnic or similar lintels over openings to manufacturer spec. ensuring min 150mm end bearings.

*New Flat Roof :
Approved AA rated single ply membrane by specialist contractor on min 18mm ext ply deck over Celotex TD4000 (126mm) or similar approved insulation 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 Td 4000 with helical fixings to correct spec. and lay to fall 1:60 across 170x50mm sw C16 joists at 400mm max centres (see notes for roof lantern trimming using double joists). Joists to be secured at house wall on heavy duty galvanised ms joist hangers with min 90mm bearing and to manufacturer specification.
NB Unless the client opts to replace the existing flat roof over the rear bedroom ensure continuous up-stand between flat roof membrane and adjoining flat roof and carry new membrane up behind main roof tiles minimum 400mm on ply deck to maintain weatherproof break to complete satisfaction of inspecting authority.
*This or similar construction to achieve max 0.18 w/m2K U-Value
*Note install built up fascia shown in pvc cladding.

*Foundation Detail:
Subject to prior exposure of existing house foundation lay 600mm wide trench filled concrete strip foundation at depth to to suit site conditions and to satisfactory bearing strata with due regard to tree root growth from adjacent property and 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.

*Floor ;
Floor finish to client requirement on min 60mm screed or power float finish to 125mm concrete slab reinforced with A193 steel fabric on 1200g dpm over Celotex FR5000 (90mm) 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 0.18 w/m2k P/A ratio = 0.42

*Drainage
See preliminary work notes - expose existing drain runs at rear at outset of work. Replace any existing pipework across rear yard in long length 100mm pvc on granular bed and surround at falls to match existing if required subject to prior assessment of condition of pipe work.
Ensure adequate support and protection to all pipes passing through walls and under new floor to complete satisfaction of inspecting authority.
Pvc rainwater goods discharging to existing rear trapped gulley subject to drain tracing at preliminary stage with drain branch to existing system as above. Internal plumbing to kitchen to satisfy BS5572 with 75mm deep seal traps as required and discharge to trapped accessible gulley connected to existing drains

* 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.

*Ventilation
Natural ventilation from opening casements as specified

*Fenestration:
Install high performance double glazed upvc units to match existing style and to client requirements using Pilkington Low E `k' glass and min 25mm cavity – max 1.60 w/m2 k U-Value
Opening casements to represent minimum 5% of adjacent floor as natural vent plus min 10000mm2 trickle ventilators to head of frame.
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 pvc/aluminium frame by specialists with thermally broken frame arrangement and double glazed safety glass as general spec. above. Form aperture to receive lantern frames (with double 170x50mm sw C16 joist trimmers to long side and double 170x75mm sw C16 joists to short side) bolted together at max 600mm centres with M18 bolts and dog tooth steel connector washers with approved steel joist hangers to trimmed members as per Engineers Design Sheets.. Follow manufacturer spec. for installation and weathered up-stand from roof membrane.
*See Engineers calculation sheets for details of trimmer etc design.

*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 lighting to be low energy type to client spec.
* Note install sockets to extension area to requirements of client and provide co-axial and satellite ports if needed.

*Drainage
Kitchen wastes to discharge to new accessible trapped gulley with 100mm pipe branch to existing system laid at 1:40 falls on granular bed.
If necessary provide new rainwater connection via trapped gullies to existing drainage system or provide garden soakaway chamber at rear (1m3) subject to percolation test and sited to approval of inspecting authority.

Proposed Single Storey Rear Extension at 3, Maple Crescent, Blythe Bridge ST11 9LL

Scale 1-50 (A1) - proposed layout
Dwg ref MC1b April 2019

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