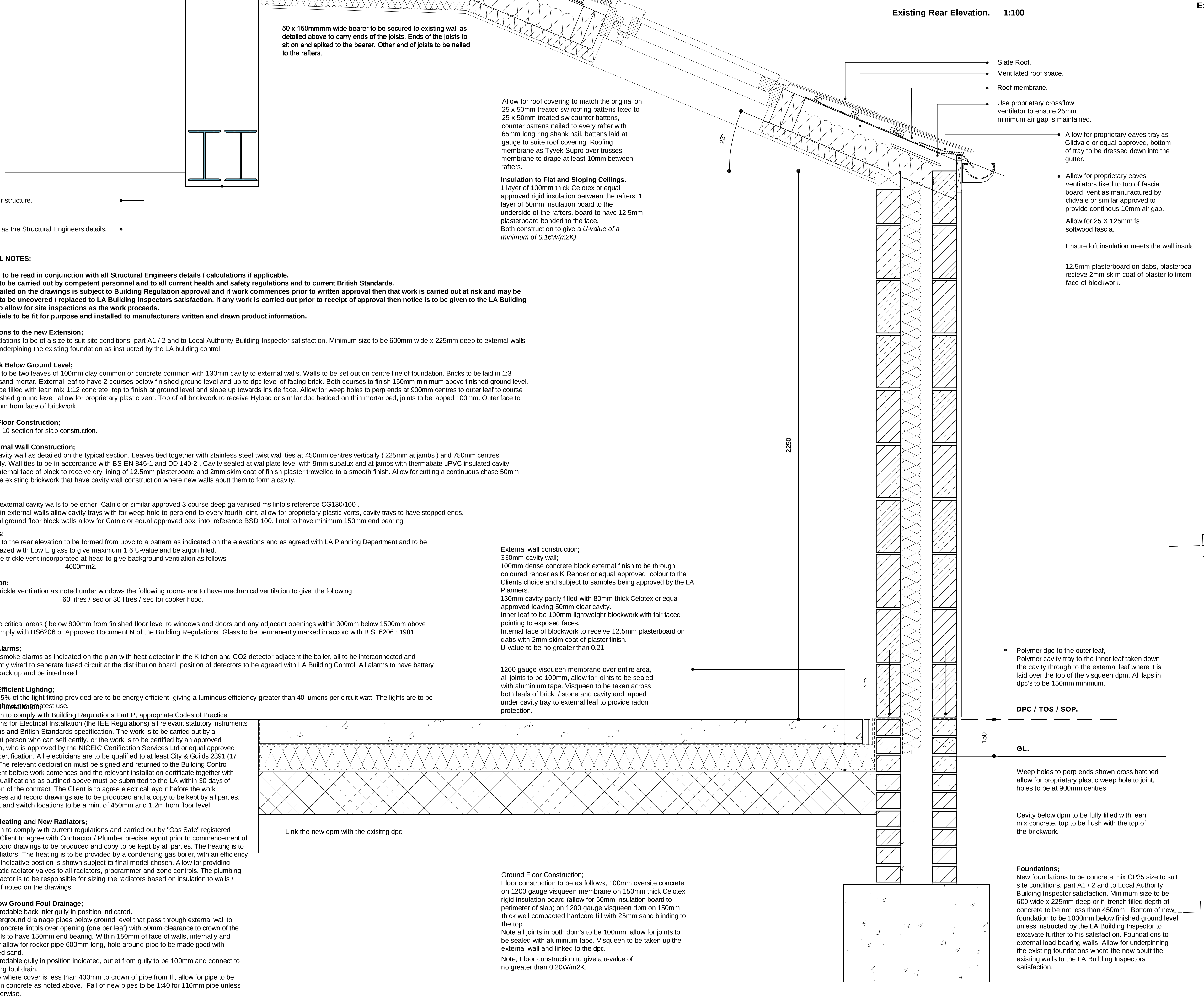

Exisitng underside of the first floor window.
100
Exisitng floor structure.
New beams as the Structural Engineers details.
23°
2250
150
DPC / TOS / SOP.
GL.

Flat roof formed from 19mm external quality plywood screwed to 50 x 150mm treated sw joists at 400mm centres maximum. Roof to have 1° pitch minimum. Roof covered with lead as detailed on section.
Cheeks of flat roof area to be covered with 19mm external quality plywood fixed to edge of rafters and 50 x 50mm treated sw frame, shown dashed. Cheeks covered with lead as detailed to the right.

Flat roof structure as detailed to the left. Roof covered with Code 5 lead flashing. Lead to be in bays not greater than 550mm and laid as LSA recomendations. Edges turned up 100mm minimum at all abutments and dressed down over roof tiles at minimum of 150mm. Code 5 lead cover flashing dressed under window cill and down over lead upstand, lead secured with lead wedges at 400mm centres, joint re-pointed after installation.
Cheeks shown dotted to receive Code 5 lead flashing, top turned under slates and secured with 25mm coper nails at 50mm centres, width of panels to be no greater than 500m, joints to be welted and secured in ss.clips at 200mm centres, bottom to cover upstand by at least 75mm. Edge abutting wall to be turned around face by 75mm and edge tucked into saw cut in brickwork, 25mm deep and secured with lead wedges at 400mm centres, render made good as necessary, joint to recive continuous bead of mastic, bottom of lead to cover upstand of roof covering by 75mm minimum.

50 x 150mmmm wide bearer to be secured to existing wall as detailed above to carry ends of the joists. Ends of the joists to sit on and spiked to the bearer. Other end of joists to be nailed to the rafters.

Allow for roof covering to match the original on 25 x 50mm treated sw roofing battens fixed to 25 x 50mm treated sw counter battens, counter battens nailed to every rafter with 65mm long ring shank nail, battens laid at gauge to suite roof covering. Roofing membrane as Tyvek Supro over trusses, membrane to drape at least 10mm between rafters.

Insulation to Flat and Sloping Ceilings.
1 layer of 100mm thick Celotex or equal approved rigid insulation between the rafters, 1 layer of 50mm insulation board to the underside of the rafters, board to have 12.5mm plasterboard bonded to the face.
Both construction to give a *U-value of a minimum of 0.16W(m2K)*

Slate Roof.

Ventilated roof space.

Roof membrane.

Use proprietary crossflow ventilator to ensure 25mm minimum air gap is maintained.

Allow for proprietary eaves tray as Glidvale or equal approved, bottom of tray to be dressed down into the gutter.

Allow for proprietary eaves ventilators fixed to top of fascia board, vent as manufactured by clidvale or similar approved to provide continous 10mm air gap.

Allow for 25 X 125mm fs softwood fascia.

Ensure loft insulation meets the wall insula

12.5mm plasterboard on dabs, plasterboar recieve 2mm skim coat of plaster to intern face of blockwork.

External wall construction;
330mm cavity wall;
100mm dense concrete block external finish to be through coloured render as K Render or equal approved, colour to the Clients choice and subject to samples being approved by the LA Planners.
130mm cavity partly filled with 80mm thick Celotex or equal approved leaving 50mm clear cavity.
Inner leaf to be 100mm lightweight blockwork with fair faced pointing to exposed faces.
Internal face of blockwork to receive 12.5mm plasterboard on dabs with 2mm skim coat of plaster finish.
U-value to be no greater than 0.21.

1200 gauge visqueen membrane over entire area, all joints to be 100mm, allow for joints to be sealed with aluminium tape. Visqueen to be taken across both leafs of brick / stone and cavity and lapped under cavity tray to external leaf to provide radon protection.

Polymer dpc to the outer leaf,
Polymer cavity tray to the inner leaf taken down the cavity through to the external leaf where it is laid over the top of the visqueen dpm. All laps in dpc's to be 150mm minimum.

Weep holes to perp ends shown cross hatched allow for proprietary plastic weep hole to joint, holes to be at 900mm centres.

Cavity below dpm to be fully filled with lean mix concrete, top to be flush with the top of the brickwork.

Link the new dpm with the exisitng dpc.

Ground Floor Construction;
Floor construction to be as follows, 100mm oversite concrete on 1200 gauge visqueen membrane on 150mm thick Celotex rigid insulation board (allow for 50mm insulation board to perimeter of slab) on 1200 gauge visqueen dpm on 150mm thick well compacted hardcore fill with 25mm sand blinding to the top.
Note all joints in both dpm's to be 100mm, allow for joints to be sealed with aluminium tape. Visqueen to be taken up the external wall and linked to the dpc.
Note; Floor construction to give a u-value of no greater than 0.20W/m2K.

Foundations;
New foundations to be concrete mix CP35 size to suit site conditions, part A1 / 2 and to Local Authority Building Inspector satisfaction. Minimum size to be 600 wide x 225mm deep or if trench filled depth of concrete to be not less than 450mm. Bottom of new foundation to be 1000mm below finished ground level unless instructed by the LA Building Inspector to excavate further to his satisfaction. Foundations to external load bearing walls. Allow for underpinning the existing foundations where the new abutt the existing walls to the LA Building Inspectors satisfaction.

Typical section to the new extension. 1:10.

GENERAL NOTES;

Drawings to be read in conjunction with all Structural Engineers details / calculations if applicable.
All work to be carried out by competent personnel and to all current health and safety regulations and to current British Standards.
Work detailed on the drawings is subject to Building Regulation approval and if work commences prior to written approval then that work is carried out at risk and may be required to be uncovered / replaced to LA Building Inspectors satisfaction. If any work is carried out prior to receipt of approval then notice is to be given to the LA Building Control to allow for site inspections as the work proceeds.
All materials to be fit for purpose and installed to manufacturers written and drawn product information.

Foundations to the new Extension;
New foundations to be of a size to suit site conditions, part A1 / 2 and to Local Authority Building Inspector satisfaction. Minimum size to be 600mm wide x 225mm deep to external walls allow or underpining the existing foundation as instructed by the LA buliding control.

Brickwork Below Ground Level;
Brickwork to be two leaves of 100mm clay common or concrete common with 130mm cavity to external walls. Walls to be set out on centre line of foundation. Bricks to be laid in 1:3 cement / sand mortar. External leaf to have 2 courses below finished ground level and up to dpc level of facing brick. Both courses to finish 150mm minimum above finished ground level. Cavity to be filled with lean mix 1:12 concrete, top to finish at ground level and slope up towards inside face. Allow for weep holes to perp ends at 900mm centres to outer leaf to course above finished ground level, allow for proprietary plastic vent. Top of all brickwork to receive Hyload or similar dpc bedded on thin mortar bed, joints to be lapped 100mm. Outer face to project 6mm from face of brickwork.

Ground Floor Construction;
Refer to 1:10 section for slab construction.

New External Wall Construction;
330mm cavity wall as detailed on the typical section. Leaves tied together with stainless steel twist wall ties at 450mm centres vertically (225mm at jambs) and 750mm centres horizontally. Wall ties to be in accordance with BS EN 845-1 and DD 140-2 . Cavity sealed at wallplate level with 9mm supalux and at jambs with thermabate uPVC insulated cavity closers. Internal face of block to receive dry lining of 12.5mm plasterboard and 2mm skim coat of finish plaster trowelled to a smooth finish. Allow for cutting a continuous chase 50mm wide in the existing brickwork that have cavity wall construction where new walls abutt them to form a cavity.

Lintols;
Lintols to external cavity walls to be either Catnic or similar approved 3 course deep galvanised ms lintols reference CG130/100 .
To lintols in external walls allow cavity trays with for weep hole to perp end to every fourth joint, allow for proprietary plastic vents, cavity trays to have stopped ends.
To internal ground floor block walls allow for Catnic or equal approved box lintol reference BSD 100, lintol to have minimum 150mm end bearing.

Windows;
Windows to the rear elevation to be formed from upvc to a pattern as indicated on the elevations and as agreed with LA Planning Department and to be double glazed with Low E glass to give maximum 1.6 U-value and be argon filled.
All to have trickle vent incorporated at head to give background ventilation as follows;

Kitchen;	4000mm2.

Ventilation;
Besides trickle ventilation as noted under windows the following rooms are to have mechanical ventilation to give the following;

Kitchen.	60 litres / sec or 30 litres / sec for cooker hood.

Glazing;
Glazing to critical areas (below 800mm from finished floor level to windows and doors and any adjacent openings within 300mm below 1500mm above ffl.) to comply with BS6206 or Approved Document N of the Building Regulations. Glass to be permanently marked in accord with B.S. 6206 : 1981.

Smoke Alarms;
Allow for smoke alarms as indicated on the plan with heat detector in the Kitchen and CO2 detector adjacent the boiler, all to be interconnected and permanently wired to seperate fused circuit at the distribution board, position of detectors to be agreed with LA Building Control. All alarms to have battery pack for back up and be interlinked.

Energy Efficient Lighting;
At least 75% of the light fitting provided are to be energy efficient, giving a luminous efficiency greater than 40 lumens per circuit watt. The lights are to be ones that have the greatest use.

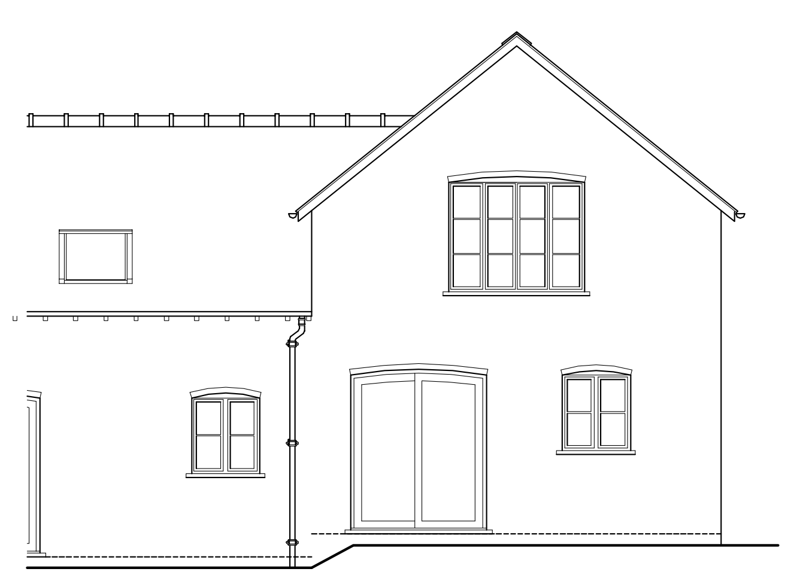
Electrical Installation;
Installation to comply with Building Regulations Part P, appropriate Codes of Practice, Regulations for Electrical Installation (the IEE Regulations) all relevant statutory instruments regulations and British Standards specification. The work is to be carried out by a competent person who can self certify, or the work is to be certified by an approved electrician, who is approved by the NICEIC Certification Services Ltd or equal approved body for certification. All electricians are to be qualified to at least City & Guilds 2391 (17 edition). The relevant decloration must be signed and returned to the Building Control Department before work comences and the relevant installation certificate together with proof of qualifications as outlined above must be submitted to the LA within 30 days of completion of the contract. The Client is to agree electrical layout before the work commences and record drawings are to be produced and a copy to be kept by all parties. All socket and switch locations to be a min. of 450mm and 1.2m from floor level.

Central Heating and New Radiators;
Installation to comply with current regulations and carried out by "Gas Safe" registered plumber. Client to agree with Contractor / Plumber precise layout prior to commencement of work. Record drawings to be produced and copy to be kept by all parties. The heating is to be via radiators. The heating is to be provided by a condensing gas boiler, with an efficiency of 90.1% indicative postion is shown subject to final model chosen. Allow for providing thermostatic radiator valves to all radiators, programmer and zone controls. The plumbing sub-contractor is to be responsible for sizing the radiators based on insulation to walls / floor / roof noted on the drawings.

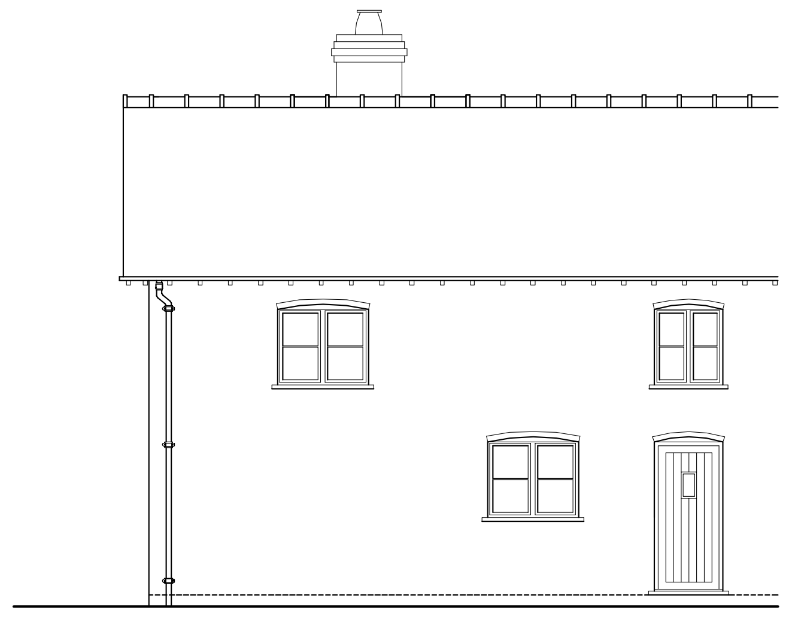
New Below Ground Foul Drainage;
Allow for rodable back inlet gully in position indicated.
New underground drainage pipes below ground level that pass through external wall to have pc concrete lintols over opening (one per leaf) with 50mm clearance to crown of the pipe, lintols to have 150mm end bearing. Within 150mm of face of walls, internally and externally allow for rocker pipe 600mm long, hole around pipe to be made good with compacted sand.
Allow for rodable gully in position indicated, outlet from gully to be 100mm and connect to the existing foul drain.
Externally where cover is less than 400mm to crown of pipe from ffl, allow for pipe to be encased in concrete as noted above. Fall of new pipes to be 1:40 for 110mm pipe unless noted otherwise.

Above Ground Drainage;
Waste from sinks / basins and shower to connect to anti-syphon bottle trap with 76mm deep seal, 40mm diameter upvc waste pipes from the traps to either pass through core holed drilled in the external wall and discharge over new gully.
Wastes from washing machine / dishwasher to connect to running trap with stand pipe at least 600mm high, trap to be 76mm deep, 40mm waste to run and pass through core holed drilled in the external wall and disharge over rodable gully.
All pipes to be clipped at 600mm centres external exposed pipes to be black.

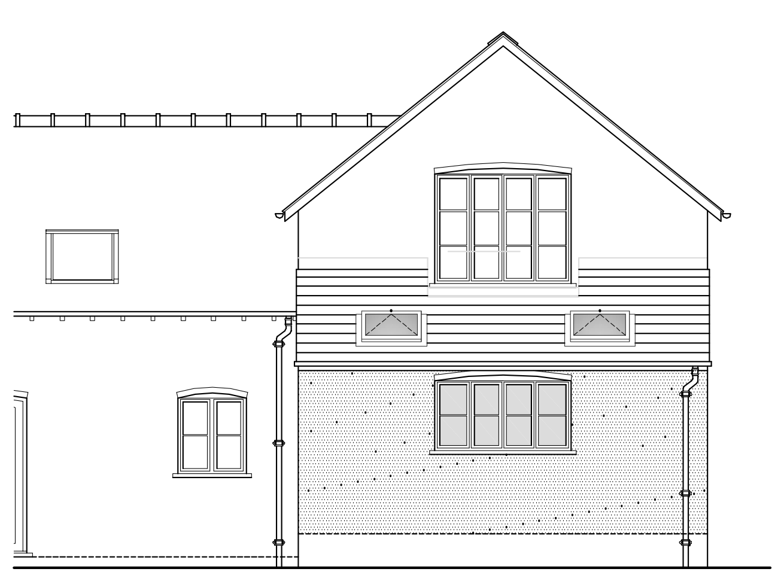
New Surface Water Drainage;
Allow for 112mm black upvc half round gutter. Gutters to connect to 68mm diameter black upvc rain water pipes. Location as indicated on the plans.
Allow for roddable gully's in positions indicated. The gully's are to connect to 110mm plastic pipe and run as indicated to new soakaway. The soakaway is to be constructed at least 5.0mts away from building, refer to site plan for the location. New surface water drain to be 110mm plastic pipe bedded on granular fill, or where below bottom of foundations surrounded in concrete up to the underside of the foundations, fall of pipe to be 1:60 minimum.
Soakaway to be constructed using plastic drainage cells, area of each soakaway to be 1200 x 1200 x 1000mm. Hole to be formed and cells placed on geotextile membrane on 100mm pea gravel bed, cells then wrapped fully in membrane, hole filled using pea gravel surround to cells with at least 150mm surround, top of hole then made good with selected backfill.



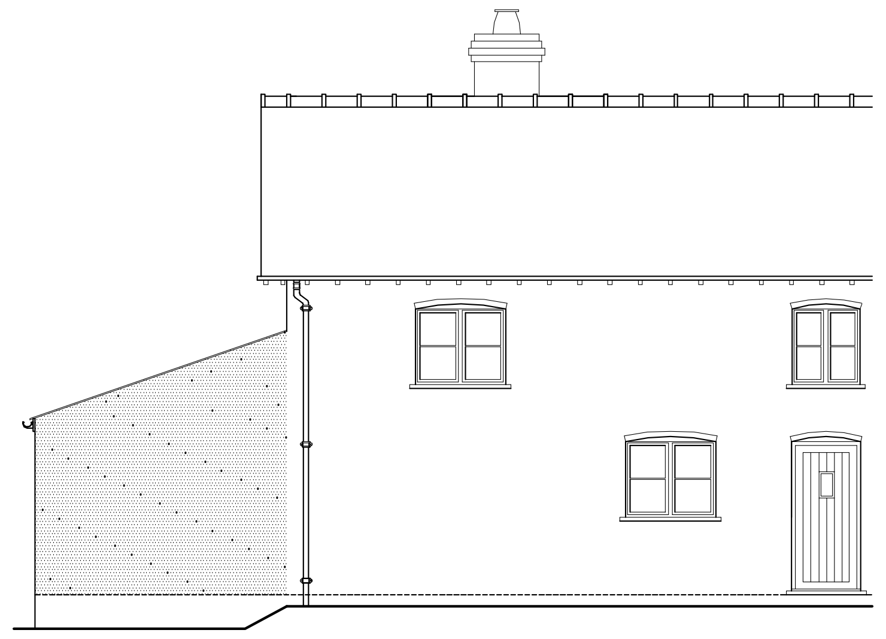
Existing Rear Elevation. 1:100



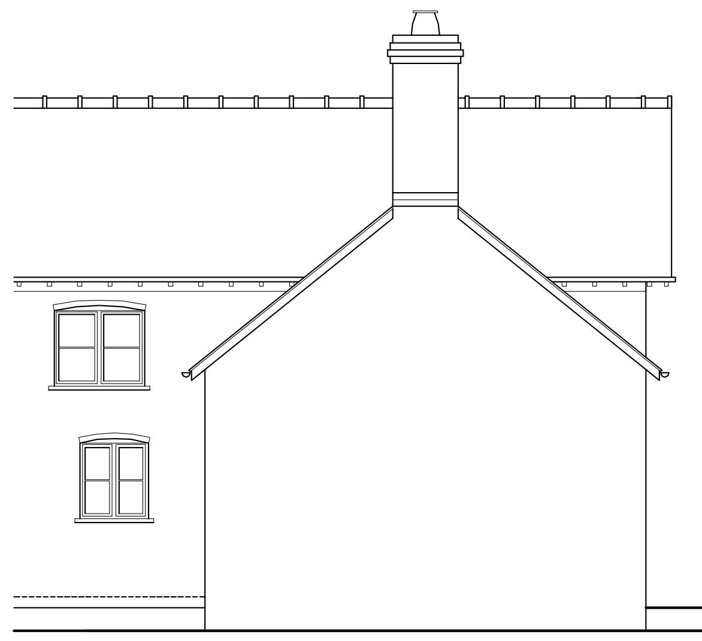
Exisitng Side Elevation. 1:100



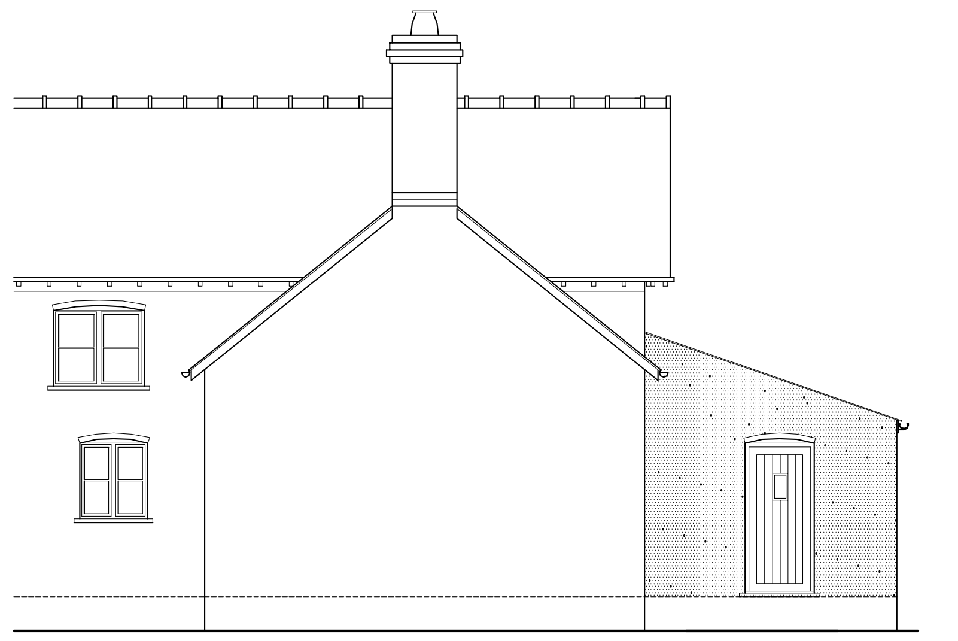
Proposed Rear Elevation. 1:100



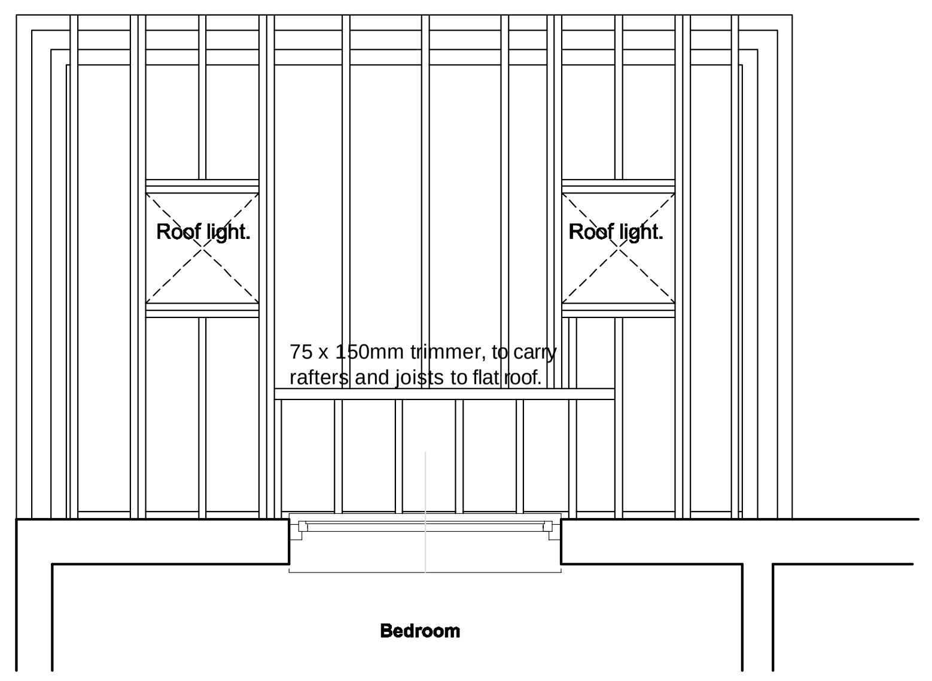
Proposed Side Elevation. 1:100



Existing Rear Elevation. 1:100



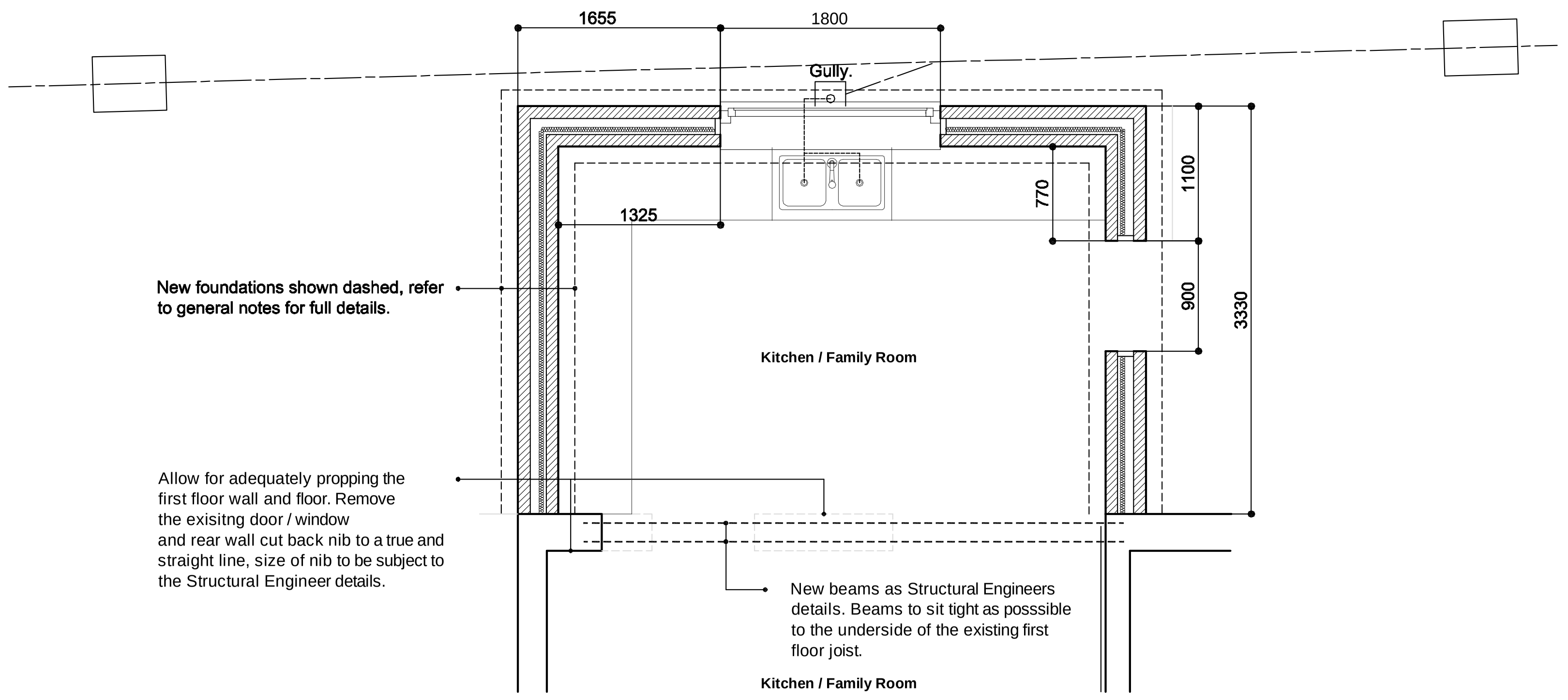
Proposed Rear Elevation. 1:100


Roof light.
Roof light.
75 x 150mm trimmer, to carry rafters and joists to flat roof.
Bedroom

Allow for cut roof formed out of 50 x 150 C16 grade sw rafters at 400mm centres. Allow for double rafters to either side of the rooflights and double noggins to the top and bottom of the rooflights. Allow for wallplate as detailed on typical section. Rafters to sit on 75 x 100mm treated sw. wallplate. Wall plate bedded on mortar bed, laps in wall plate to be half lap joints 100mm minimum. Wall plate to be secured with 5 x 30 x 1200mm galvanised ms. straps at 1000mm centres. Straps to be fully screwed to top of wall plate and face of blockwork. Allow for straps as detailed above to verge, similar centres.

50 x 150mm bearer to be secured to existing wall with M10 rawbolts at 600mm centres maximum, to carry rafters.

Proposed Roof Plan. 1:50.

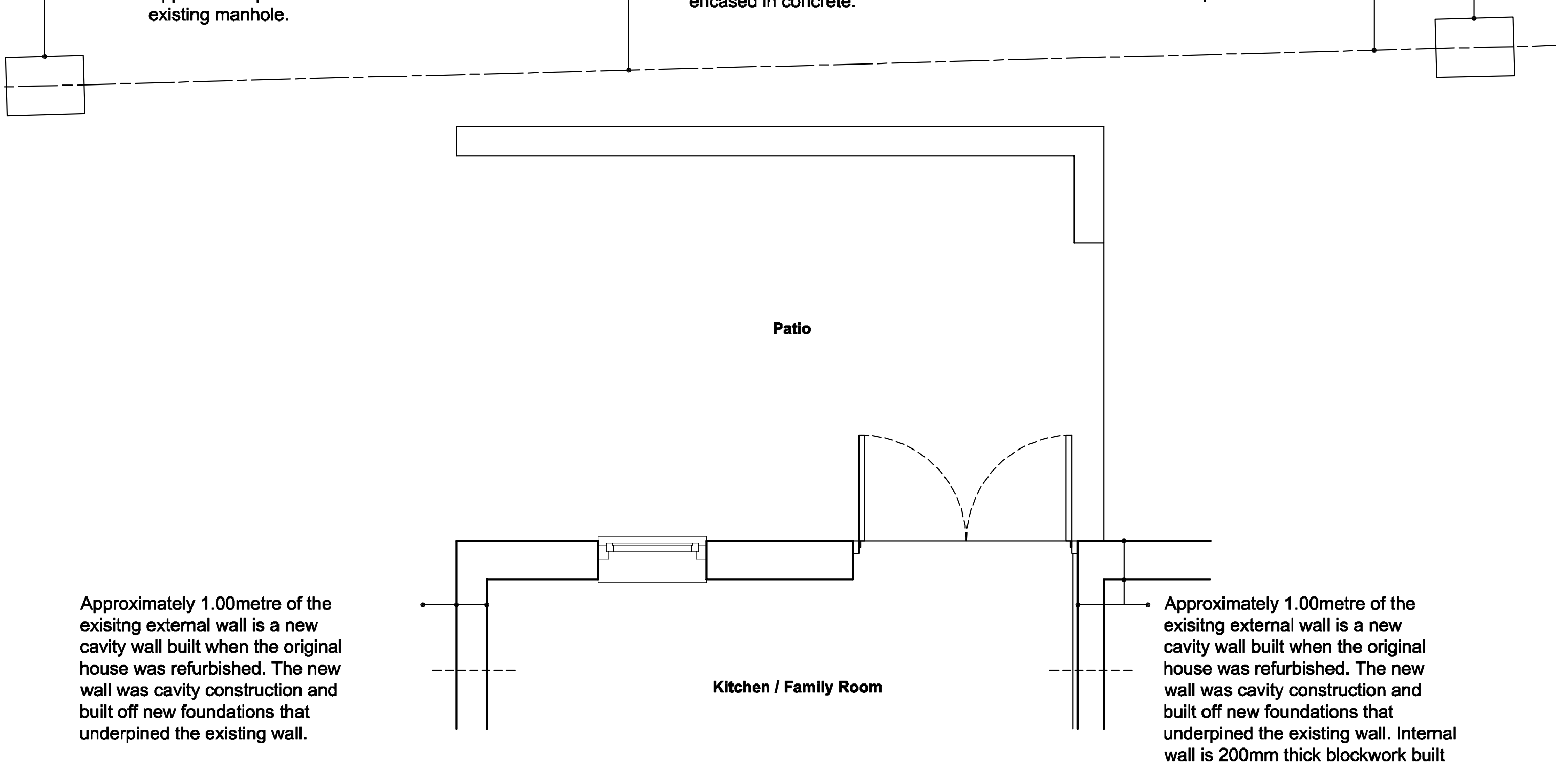


New foundations shown dashed, refer to general notes for full details.

Allow for adequately propping the first floor wall and floor. Remove the exisitng door / window and rear wall cut back nib to a true and straight line, size of nib to be subject to the Structural Engineer details.

New beams as Structural Engineers details. Beams to sit tight as posssible to the underside of the existing first floor joist.

Proposed Ground Floor Plan. 1:50.



Approximate position of the existing manhole.

Care to be taken when removing the existing patio walls, foundations and patio. Carefully expose the foul drain and allow for inspection by the LA Inspector to establish if the exsting drain is to be encased in concrete.

Approximate position of the existing manhole.

Approximate position of the existing foul drain to remain. Drain runs to septic tank.

Approximately 1.00metre of the exisitng external wall is a new cavity wall built when the original house was refurbished. The new wall was cavity construction and built off new foundations that underpined the existing wall.

Approximately 1.00metre of the exisitng external wall is a new cavity wall built when the original house was refurbished. The new wall was cavity construction and built off new foundations that underpined the existing wall. Internal wall is 200mm thick blockwork built of new foundation.

Exisitng Ground Floor Plan. 1:50.

All dimensions to be checked and confirmed on site prior to any construction. Discrepancies to be reported to Miles Design immediately.

Figured dimensions to be taken in preference to those scaled.

Mr S. H. Miles accepts no responsibility for any unauthorised amendments / deviations to the drawing.

All materials/workmanship to be to current British Standards and Codes of Practice. All specified materials to be installed as manufacturers written product information and where applicable by their approved contractors. Where equal approved is noted as an alternative the contractor is to supply details as requested of alternatives proposed. All materials to be fit for purpose.

Proposed Extension to the existing house to form enlarged Kitchen / Family Room to Spring Grove Barn, Hugmore Lane, Wrexham for Mr & Mrs. D. Haycocks.

S. H. MILES
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07747 041200
Email

Rev A. 13/05/2019. Rear Elevation Added.
Rev B. 28/05/2019. Additional Rooflight Added.

Title :

EXISITNG AND PROPOSED
PROPOSED PLANS.
TYPICAL SECTION AND ROOF PLAN.
CONSTRUCTION NOTES.

Scale :	**1:10 / 1:50 @A1.**
Drawn :	**SHM.**
Date:	**April 2010**
Approved:	

Job. No:	**Dwrg. No:**	**Rev.**
19/02	**01**	**B**

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