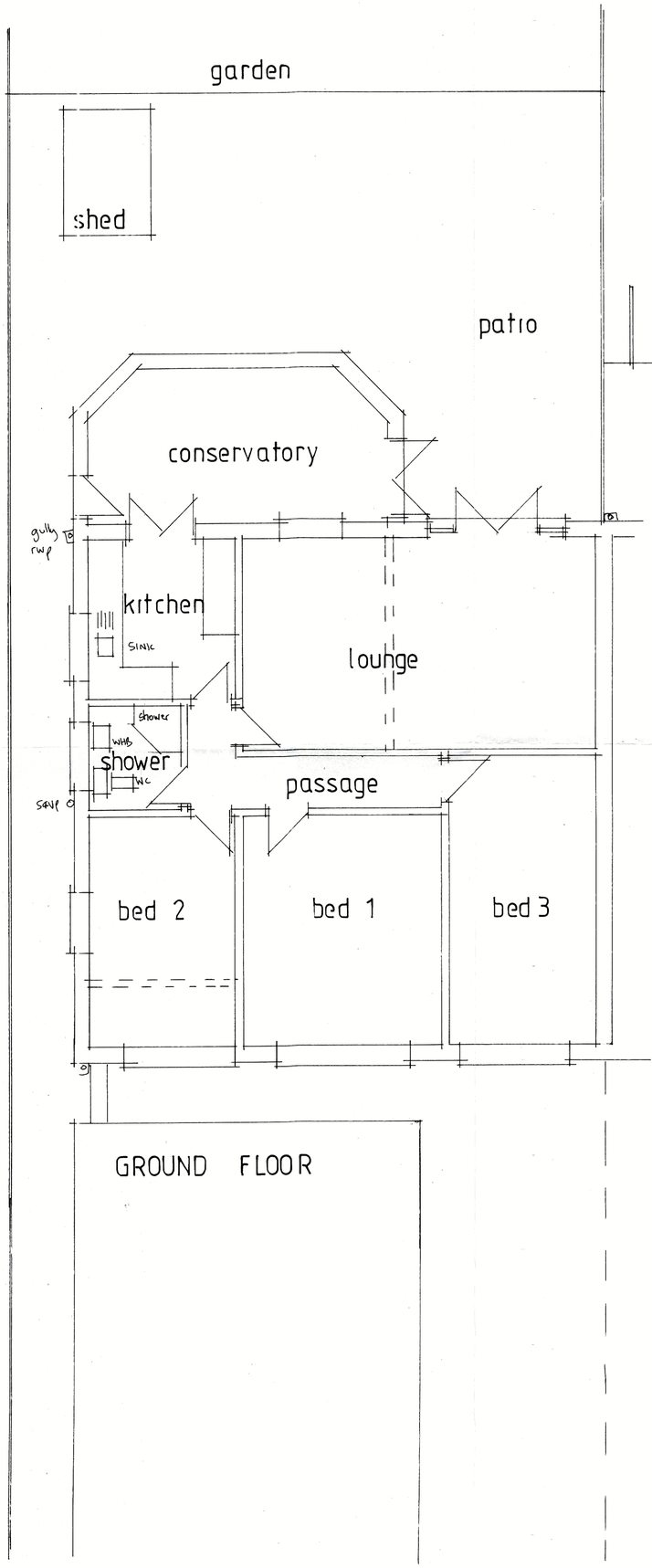
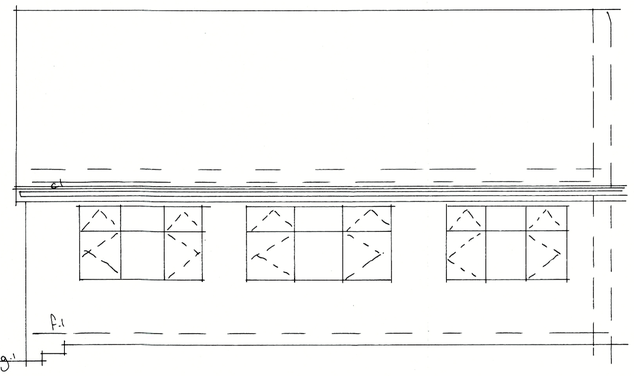
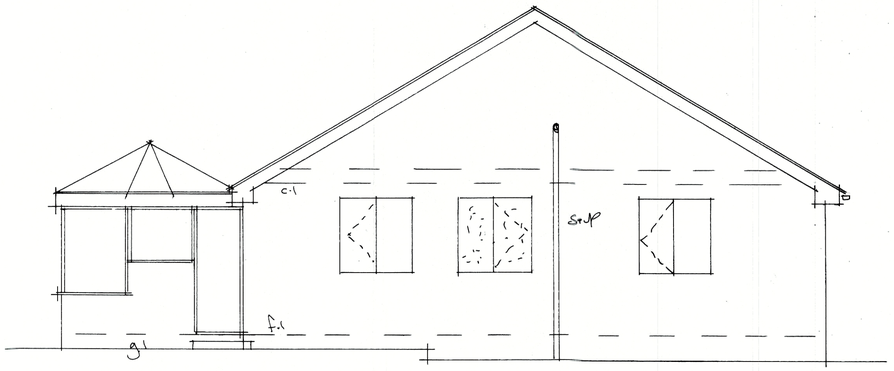


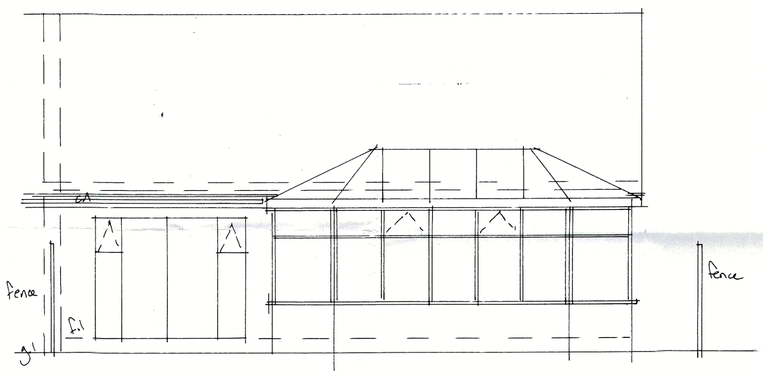
GROUND FLOOR



FRONT ELEVATION



SIDE ELEVATION



REAR ELEVATION

PROJECT
PROPOSED SINGLE STOREY REAR EXTENSION, INTERNAL ALTERATIONS AND REAR DORMER.

DRAWING TITLE
EXISTING LAYOUT, AND ELEVATIONS.

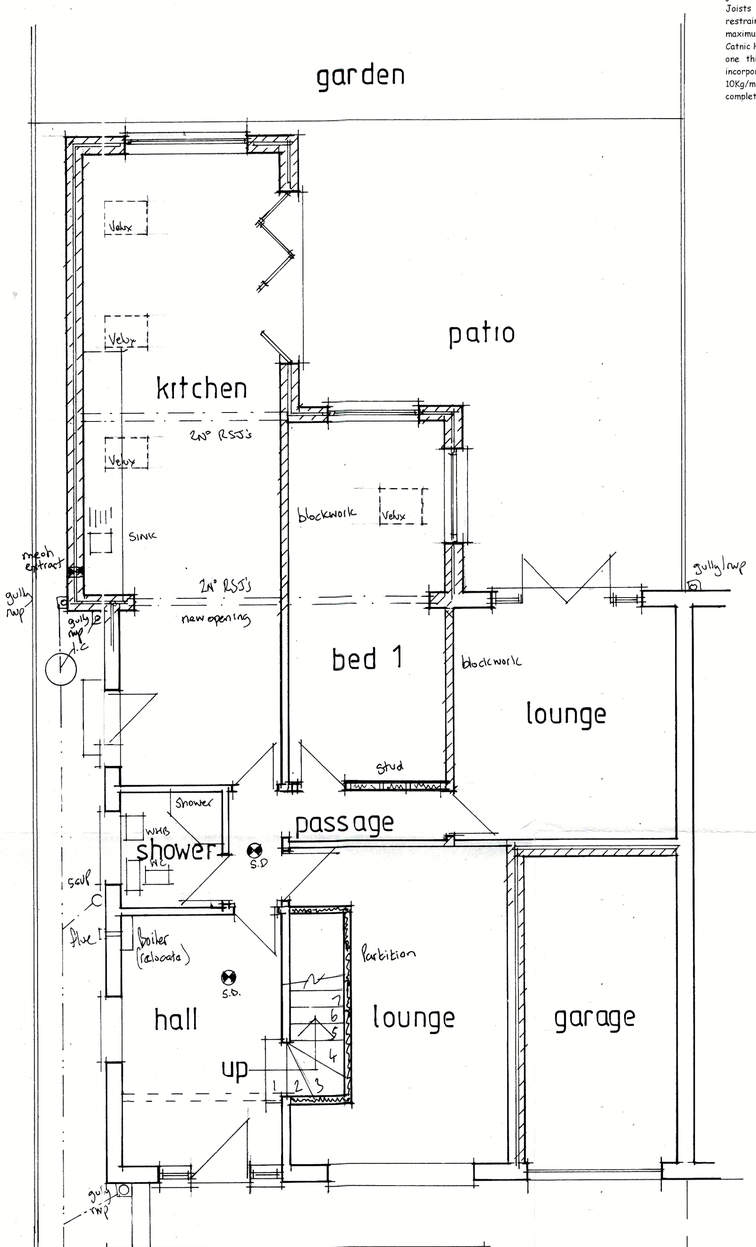
CLIENT
MRS. D. LORD.

ADDRESS
48, CHELTENHAM ROAD, ALKRINGTON, MIDDLETON. M24 1HG.

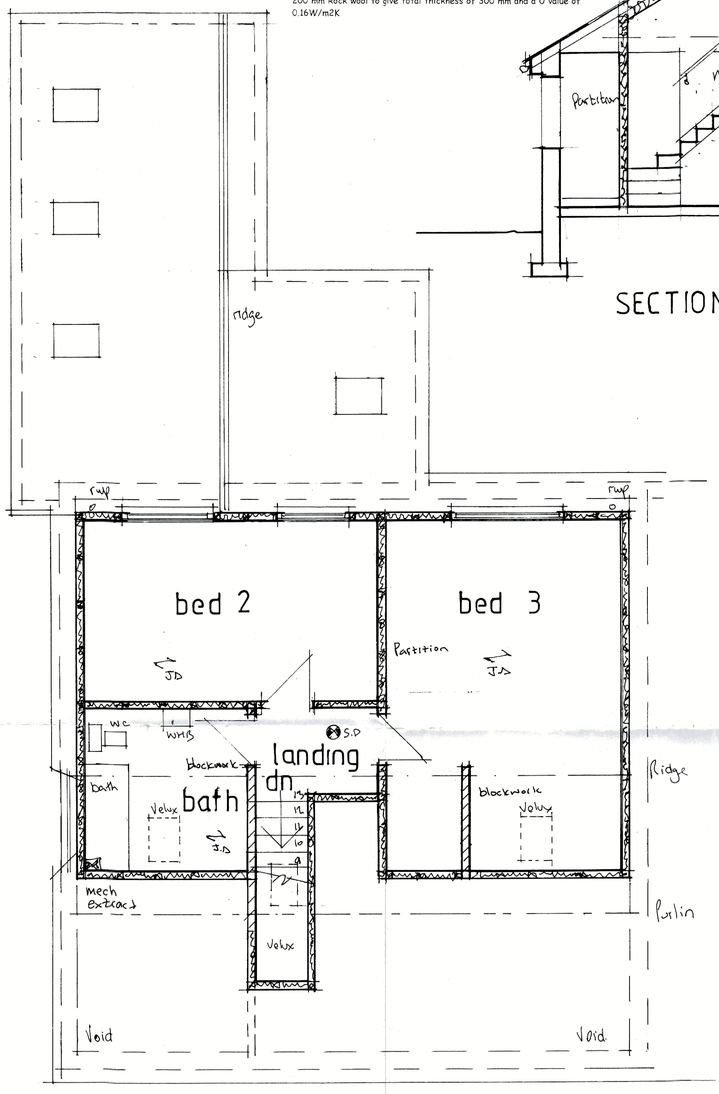
SCALE
SCALE 1:50

DATE
APR 2019.

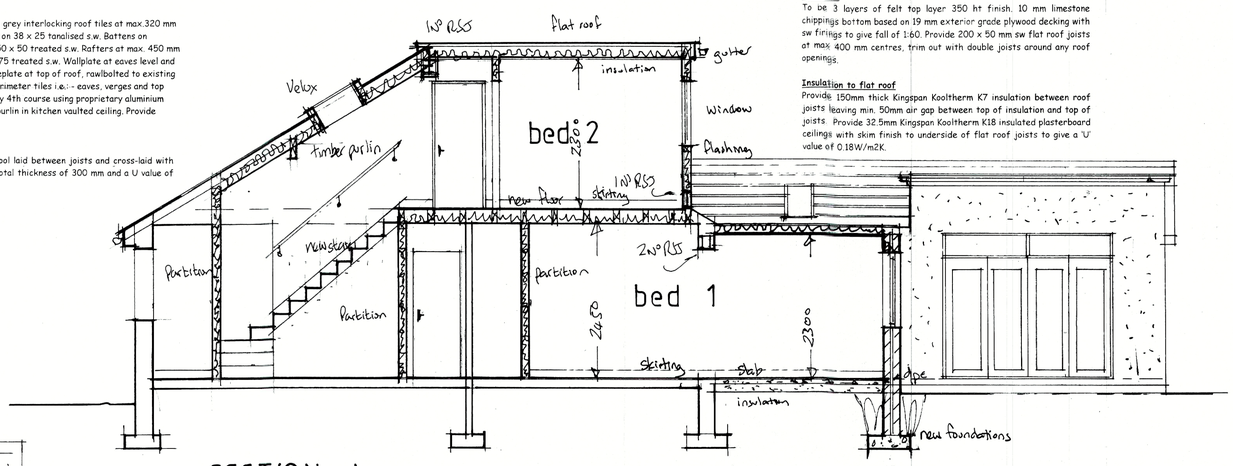
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RC 04195450/1.



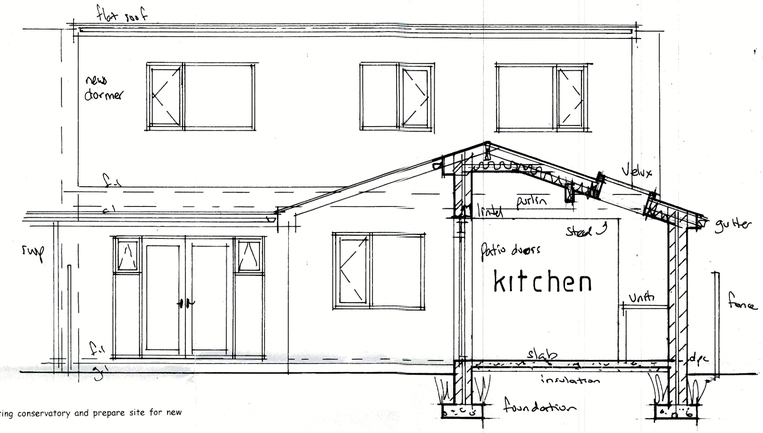
GROUND FLOOR



FIRST FLOOR



SECTION A



SECTION B

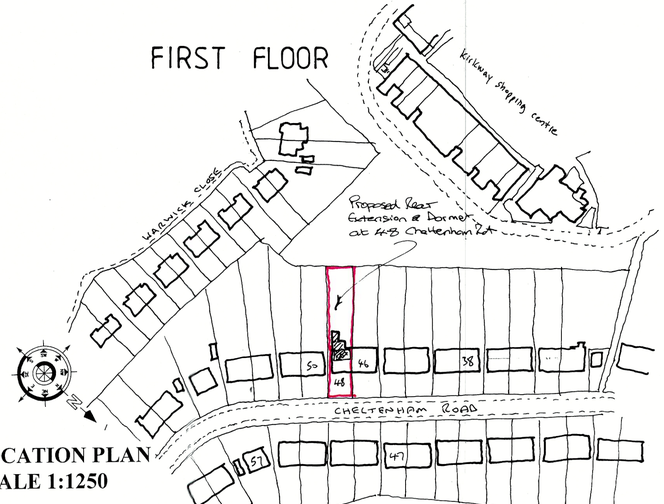
First Floor
22 mm moisture resistant tongue and groove chipboard flooring (minimum mass per unit area 15Kg/m2), on 50x 200 mm C16 tanalised softwood joists at 400 mm centres, to first and second floor levels of house, joists doubled up and spiked together beneath all first floor partitions'. Joists built into external walls and packed as necessary. Lateral restraint provided by 30 mm x 5 mm galvanized mild steel straps at maximum 2000 mm centres, in accordance with Building Regulations, Catnic Herringbone joist struts at mid span between 2.5 m and 4.5 m and one third span greater than 4.5 m. Floor void between joists to incorporate minimum 100 mm of Rockwool Flexi quilt (minimum density 10Kg/m3). Joists to be underlined with 12.5 mm Gyproc Wallboard TEN complete with skim finish to form ceiling were necessary.

New roof construction
Marley modern' type smooth grey interlocking roof tiles at max 320 mm gauge (min. 100 mm headlap) on 38 x 25 tanalised s.w. Battens on untearable sarking felt on 150 x 50 treated s.w. Rafters at max. 450 mm centres supported on 100 x 75 treated s.w. Wallplate at eaves level and on 150 x 63 treated s.w. Poleplate at top of roof, rawlbolted to existing rear external wall. Clipall perimeter tiles i.e.:- eaves, verges and top course and every tile in every 4th course using proprietary aluminium clips. Insert 200 x 100 mm purlin in kitchen vaulted ceiling. Provide continuous ridge vents.

Roof void Insulation
To be 100 mm thick rock wool laid between joists and cross-laid with 200 mm Rock wool to give total thickness of 300 mm and a U value of 0.16W/m2K

Flat roof
To be 3 layers of felt top layer 350 ht finish. 10 mm limestone chippings bottom based on 19 mm exterior grade plywood decking with sw firrings to give fall of 1:60. Provide 200 x 50 mm sw flat roof joists at max 400 mm centres, trim out with double joists around any roof openings.

Insulation to flat roof
Provide 150mm thick Kingspan Kooltherm K7 insulation between roof joists leaving min. 50mm air gap between top of insulation and top of joists. Provide 32.5mm Kingspan Kooltherm K18 insulated plasterboard ceilings with skim finish to underside of flat roof joists to give a 'U' value of 0.18W/m2K.



LOCATION PLAN
SCALE 1:1250

Demolish
Carefully take down existing conservatory and prepare site for new building works.

Foundations
Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from GL to DPC level externally and concrete block work internally. Walls built off 700 x 200 (C20 mix-20N/mm2) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm end bearing onto adjacent brickwork.

Cavity walls (Kingspan K108)
Cavity walls to be 300 mm overall construction to comprise of 100 mm outer skin of blockwork with cream K render finish as per main building with inner skin of 100 mm Thermolite Sheild blockwork. Both skins laid on 1:6 mortor mix with plasticizer and bonded together with Ancon Staifix RT2 cavity wall ties, suitable for cavities up to 100 mm wide, staggered in alternate rows and spaced 750 mm horizontally and 450 mm vertically. All cavities closed at eaves, door and windows openings with Thermabate or similar insulated cavity closers. 100 mm cavity partially infilled with 50 mm Kingspan Kooltherm K108 Cavity Board with blockwork lined internally with 12.5 mm plasterboard on dabs to provide a maximum "U" value of0.28W/m2K. Plasterboard returned into all window and door openings and with continuous band of adhesive around all openings at base and heads of wall and at external corners, in accordance with Accredited Construction Details with details checked on site to maintain quality assurance. All new internal solid walls to comprise of 100 mm skins of dense concrete blockwork (7KN) with 12.5 mm Gyproc Wallboard on dabs with skim finish.

DPC's
Cavity wall and internal block work walls to incorporate PVC type dpc at ground floor finished level minimum 150 mm off external ground level. Polypropylene cavity trays to be installed in cavity walls above openings, single storey roofs, complete with weep-holes @ maximum 1000 mm centres to BS 5628 Part 3.

Existing Structure
The existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy to support new imposed 'dead' and 'live' loading conditions prior to commencement of work and as required by the Local Authority Building Control Officer.

Cavities
To be continuous with existing closed at eaves with Superlux

Cavity fill
Weak concrete mix. Fill in cavity to be 225 mm below DPC level

Dividing Wall
Construct new 100 mm thick 4 KN concrete block dividing wall keyed into new and existing walls all built off new 600 x 200 mm concrete foundation all to Reg A1 & 2

Forming new opening
Cut down existing brick wall to form new opening for staircase. Insert new lintel. Make good floor, wall and ceiling where necessary

Cavity closer
Insert Isofoam XCC insulated cavity closer to all new openings all as document I 2013. Width and fixing to suit opening

Steel Beams and Brick Piers
The design has required the use of a number of steel beams and brick piers as designed by a Structural Engineer.
The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction process.

Ground Floors.
Ground Floor to comprise of 75 mm sand cement screed, over 500 gauge polythene vapour control layer, over 150 mm Kingspan Kooltherm K3 phenolic board (thermal conductivity 0.020W/mk) or similar approved, to provide maximum U value of 0.22W/m2K based on a (P/A of 0.3), on polythene separating layer, on 100 mm thick concrete slab (C20 mix-20N/mm2) on 1200 gauge DPM, lapped minimum 100 mm with all DPC's, on 25 mm sand blinding, on150 mm well compacted hardcore. 25 mm Kingspan Kooltherm K3 phenolic board to be lapped vertically up perimeter of screed to limit thermal bridging in accordance with Part L1A 2013 Edition, section 3.90 and Robustdtails 4.13 of Limiting Thermal Bridging and air leakage Robust Construction details for dwellings similar buildings amendments 1TSO 2002.

Drains
100 mm drains min fall 1:40 all to comply with BS en 295

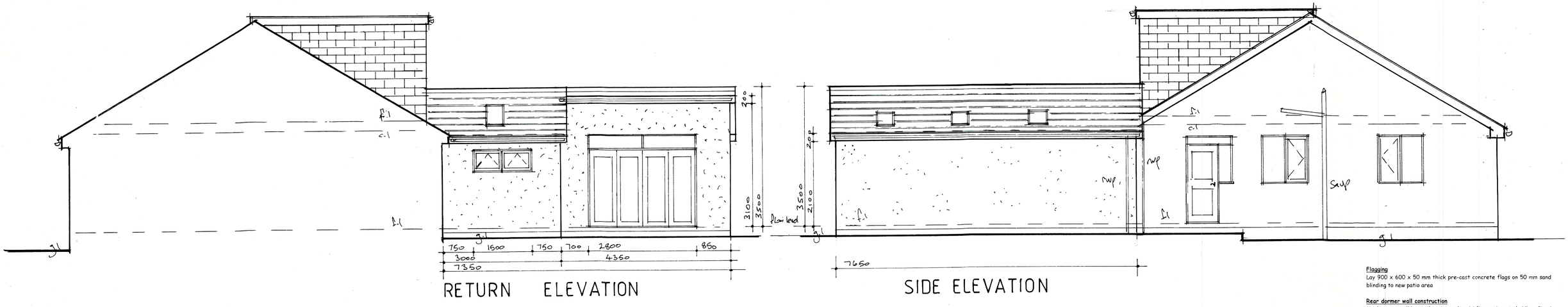
Drain Testing
The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

Drainage bedding and backfilling
New drains to be bedded on min. 100mm deep granular bed. Provide granular sidefill 150mm wide to each side of drainage pipes up to crown of pipes and then provide min. 100mm deep granular fill over top of drains for at least 100mm over crown of pipes. Provide 'as dug' backfill from this level up to ground level, free of stones in excess of 40mm. Granular material to be 10mm single size pea gravel to BS 882. New drainage to comply with protection from settlement paragraphs 2.23 - 2.26 and bedding and backfilling paragraphs 2.41 - 2.45.

Invert level
Foundations to be below invert level of any drains passing through new extension foundations

Encase drains
All drains passing under new extension to be encased in 150 mm thick concrete. Where drains pass under extension walls to be bridged over with 150 x 100 mm reinforced concrete lintels.

PROJECT
PROPOSED SINGLE STOREY REAR EXTENSION, INTERNAL ALTERATIONS AND REAR DORMER.
DRAWING TITLE
PROPOSED LAYOUTS AND SECTION.
CLIENT
MRS. D. LORD.
ADDRESS
48, CHELTENHAM ROAD, ALKRINGTON, MIDDLETON. M24 1HG.
SCALE
SCALE 1:50
DATE
APR 2019.
DRAWING No
RC 04195450/2.

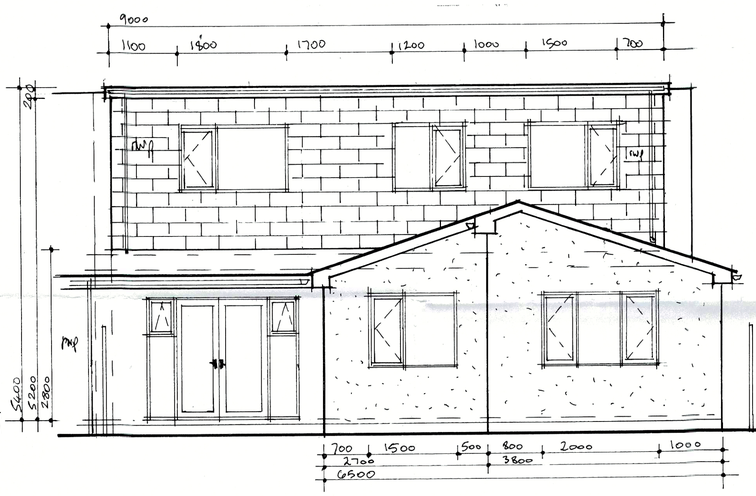


RETURN ELEVATION

SIDE ELEVATION



FRONT ELEVATION



REAR ELEVATION

Straps
Strap down all roof timbers i.e. Wall plate rafters ceiling joists etc with galvanized mild steel gang nail straps at max 2m centres and at first floor level across first two joists giving lateral restraint to walls

Continuous Ventilated Ridge
Provide new continuous ventilated ridge to be mechanically fixed and bedded in sand/cement mortar, or dry fixed system in accordance with BS 5534 2014

Stairs
New Oak internal staircase in configuration shown to comprise of 245 mm treads and 204 mm risers to provide maximum pitch of staircase 41 degrees with minimum 2 metres head room throughout, hand rail at 900 mm height above pitch line/landing, complete with vertical balustrades at maximum 100 mm centres. all in accordance with Approved Document K of Building Regulations.

Non-loadbearing Walls.
All non-loading partitions to comprise of 75x50 mm softwood studs@ 450 mm centres, and 75 mm softwood noggins @900 mm centres, with continuous header and soleplates, and with 15 mm Gyproc Wallboard (minimum mass per unit area 10Kg/m2) and 15 mm Gyproc moisture resistant board to bathroom, ensuite and WC, joints sealed complete with skim finish to both sides. All stud partitions to have 60 mm thick Rockwool Flexi insulation quilt between studs (minimum density 10Kg/m3).

Sanitary fittings to new bathroom
W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap to 100 mm diameter upvc soil branch pipe connected to new 100 mm diameter upvc s & vp. Lavatory basin to have 75 mm deep seal trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to new 100 mm diameter upvc s & vp. Bath to have 75 mm deep seal anti vac trap and 42 mm diameter upvc waste connected to new 100 mm diameter upvc s & vp. Connect all fittings to new hot and cold system All sanitary pipe work to be carried out in accordance with BS 5572:1978.

Gutters and fascia
100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit vetilators to vent roof space to BS 5250.

Heating
Extend all heating and hot water services from existing and provide new thermostatic valve to radiators. Heating system is to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authority by laws, gas safety requirements and IEE Regulations.

Existing manhole
Connect new drainage system into existing manhole. Bench up in concrete to form channel

Inspection chamber
Provide 450 mm diameter polypropylene inspection chamber positioned over new drain at change in direction. Cut down height of chamber to suit ground level and finish with cast iron cover

Windows (New or replacement)
To be grey upvc double glazed opening light to equal 1/20th of floor area of room affected double glazing with 16 mm Argon filled air gap optitherm glass and soft low e coating u value to be 1.6W/m2K Built in trickle vents 2500 mm2 equivalent area to shower room and kitchen areas and 5000 mm2 to bedroom areas. Glazing will conform to BS 6206:1981 in respect of Kite marked safety glass.

Windows and Doors.
New grey bifold doors to be powder coated aluminium, all with minimum 16 mm air gap with argon filled double glazing with pilkington K Glass S soft coated inner pane to achieve maximum "U" value of 1.54W/m2K to windows and doors and 1.77W/m2K to bifolds with fully draught stripped open able light equivalent to minimum 1/20 floor area for purge ventilation and including minimum 5000 mm 2 trickle vents per habitable rooms and 2500 mm 2 for non habitable rooms (kitchen, bathroom, en-suite) for background ventilation in accordance with Part F 2010 Edition System1 Table 5.2a and based on 277m2 floor area-total equivalent ventilator area 194000m2.
Frames to be lapped minimum 30 mm across cavity closer in accordance with Part L1A section 5.9 and Accredited Construction details under section 5.12 to limit thermal bridging. Details to be inspected on site in accordance with checklist to maintain quality assurance.
Any glazing within 800 mm of floor level, and within 1500 mm of floor level where within 300 mm from a door and all glazing to bifold doors to be safety glass to comply withBS6206.

Ceilings
To be 100 x 50 mm sw ceiling joists at 400 mm centres under drawn with 12.7 mm foil-backed plasterboard and skim finish

Garage ceiling
Under drawn garage ceiling with 6 mm Superlux to give adequate ½ hour fire resistance.

New opening
Break open existing rear wall at ground floor level from floor to ceiling to form new opening as shown and provide and insert 2 no. R.S.J.'s over supported both ends concrete padstones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations

Garage step
Form min 100 mm step up from garage into habitable area

First Floor Partition walls to roof void (room in roof).
Provide 90mm thick Kingspan Kooltherm K12 insulation board within framing ('U' Value of 0.28 W/m2K).25 mm over frame. Finish internally with 12.5mm foil backed plasterboard and skim.

R.S.J.'s
Encase new RSJ with 2 layers of 12.5 mm plasterboard and skim with staggered joints to give 1-hour fire protection.

Ventilation
Mechanical ventilation to bathroom by Xpelair DX100 wall mounted extractor or DX100 ceiling mounted extractor. Extractors capable of min 15 L/S extraction and to incorporate minimum 15 min over run timer. Similarly mechanical ventilation to Utility by Xpelair SL150 wall mounted extractor (min 30 L/S). Mechanical ventilation incorporating in the cooker hood in the kitchen (min 30 L/S) ducted to external wall.

Kitchen Ventaxia
Mechanical ventilation to Kitchen to give 3 air changes per hour connected to light switch into 150 mm upvc pipe to outside with cowl fixed all to regulation F1 2010 60 litres/second

Background ventilation
All new habitable rooms to have background ventilation not less than 8000 sq mm kitchen and en-suites to have 4000 sq mm. Insert permanent trickle vents to heads of all windows to rooms affected. Al to regulation F1 2010

Lighting
Provide 75% of new primary light fitting units to new extension to be of type, which will only take high efficiency lamps Provide min one third of primary lights to have a luminous efficiency greater than 40 lumes per circuit watt. The amount/type of light fittings and electrical wall sockets is to be agreed with the owner before work commences on site.

Electrical Contractor (Competent Person)
All the wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of
BS 7671, the IEE 18th edition wiring guidance and Building Regulations Part P (electrical safety) by a competent person registered with an electrical self certification body authorised by the Secretary of State, AND
The competent person is to send to the approved inspector a 'self certification certificate' within 30 days of the completion of the electrical works. The Client is to be provided with a copy of the 'self certification certificate' and a BS 7671 electrical installation test certificate.

800 Internal doors
800 door set comprising 1981x726x44 solid core flush doors painted three coats . set in softwood frame 13 mm rebated and with ex. 50x25 sw architraves. Doors fitted with 1.5 pairs 100 mm bolts and 1 set lever handles. Style and type of paneled door to client's choice.

Lead work and flashings and any valleys.
Use Code 5 lead and laid according to lead development association. Flashing to be provided to all jambs and below window openings with welded up stands. Joints to be lapped min 150 mm and lead to be dressed 200 mm under tiles.

Condition Notes
1. The drawings relating to the proposed project are for the purpose of obtaining Planning and Building Regulations approval only.
All work thereafter is undertaken solely at the Clients/ Contractors discretion and liability is therefore transferred.
2. In order to prepare these drawings, certain assumptions have been made which have to be verified both before and during the course of the works. Should at any time the existing construction be exposed which does not agree with these drawings or dimensions vary, then the engineer should be informed immediately and suitable actions taken.
3. All work must be carried out in accordance with the relevant building regulations and codes of practice.
4. Do not scale from drawings. Work only from figured dimensions. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately.
5. The drawings relating to the proposed project must be read in conjunction with and checked against any structural engineer's or specialist drawings and details provided.
6. The Contractor is to notify Building Control at the appropriate stages of construction – necessary for them to determine the works statutory compliance.
7. Before work commences – ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the Local Authority.

New ceiling fixed to u/side of rafters (room in roof).
Provide 75mm thick Kingspan Kooltherm K107 pitched roof board between rafters, u/side flush with bottom of rafters, leaving min. 50mm ventilated void to u/side of existing roof battens.
Provide a further 57.5mm (total thickness) Kingspan Kooltherm K118 insulated plasterboard fixed to u/side of new rafters to give a 'U' value of min. 0.18W/ m.sq. K.
Provide 3mm plaster skim finish to ceiling.

Garage door
New metal up and over garage door timber frame spring loaded, side-locking device.

Radiators
Provide and fit thermostatic control valves to radiators.

Party Wall Act
Any works falling within the Party Wall Act 1996. The client to serve written notice on the owners of adjacent properties affected of the intention to build within 2 months of commencement date. Written permission to be obtained. Further information about the Act can be found in the explanatory booklet available to download from:
https://www.gov.uk/party-wall-etc-act-1996-guidance.

Smoke alarms and heat detectors.
Fire Safety Approved Doc B
Where new habitable rooms are provided above ground level, a fire detection system shall be installed. Provide a mains linked smoke alarm in the circulation space on all levels in accordance with Paragraph 1.10 t0 1.18. Also provide 1 no smoke detector to ground floor.
There will be a compatible interlinked heat detector or heat alarm in the kitchen, in addition to whatever smoke alarms are needed in the circulation space.

Fire resistance to new staircase.
Overlay underside of new staircase with 2 layers of 12.5mm thick Gyproc 'FIRELINE' board laid in accordance with manufacturers instructions to give min one hour fire resistance.

Timber
All new timber to be tanalized and stress graded 4
BS:4471 Part 1 (1978) Dimensions for softwood
BS:5268: Part 5 Preservatives Treatment for Structural Timber

Velux windows
Provide and fit in roof all as per manufacturers instructions new velux windows Ref No GHL M08 double rafters and trimmers to be fitted either side. Location and size as indicated. Insert all soakers and flashings and a u value to be 1.6W/m2K.

Escape windows
Opening lights suitable for rescue / means of escape are required to be min 0.33 sq m with min dimension of 450 mm wide x 740 mm high max 1100 mm above floor level (clear opening when in the open position).

Doors (New or replacements)
External door to be grey upvc double glazed u value of door to be 1.8w/m2K

Kitchen sink
To have 75 mm deep seal trap into 42 mm diameter upvc waste into back inlet gully

Skirting
120 x20 mm half round skirting primed and painted three coats (1 gloss) to new extension

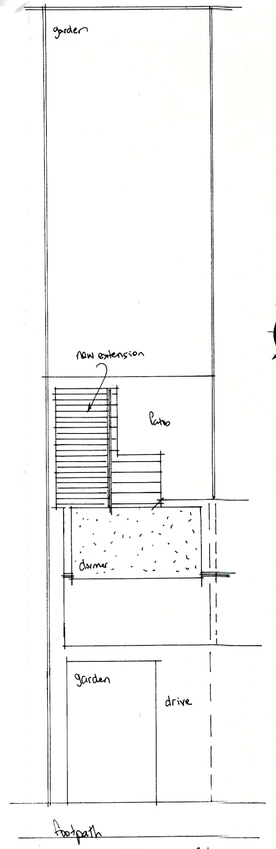
Flagging
Lay 900 x 600 x 50 mm thick pre-cast concrete flags on 50 mm sand blinding to new patio area

Rear dormer wall construction
Marley grey wall hung tiles giving class 'a' fire resistant cladding fixed to 38 x 19 treated sw vertical battens at a gauge to suit on breathable sarking felt membrane on plywood sheathing. 125 x 50 treated sw framing at 400 centres with noggins at 600 vertical centres. Provide 38 x 19 treated sw counter-battens with no.4 lead fixed to counter-batten and dressed to window frame. At abutments with gable wall provide no.3 lead soakers (felt to overlap) and dressed down min. 200 mm over roof 100 mm thick 125 mm thick KINGSPAN insulation between studding and vapour barrier to warm side of insulation giving a u value of 0.28 insert 100 x 100 mm sw corner posts and each side of any windows, insert 150 x 100 lintel over any opening in dormer.

Dormer cheeks to adjoining boundaries.
Insert 6 mm thick supalux for boundary dormer cheeks fixed to the outside of the dormer framework in addition to 12.5 mm plasterboard to inside face of framework.

Electrical Fittings.
All sockets to be positioned above 450 mm from floor level, and all switched to be positioned below 1200 mm from finished floor level to comply with Part M of the Building Regulations. Minimum 3 out of every 4 internal light fittings and all external lights to incorporate only fittings with LED lamps-luminous efficiency greater than 45 lamp lumens/circuit-watt and total output greater than 40 lamp lumens, with and external lights to incorporate daylight sensor, all in accordance with Part L1B section 4.24 Building Regulations (2010 Edition with 2013 amendments) and Table 42 of Domestic Building Service Compliance Guide 2013 Edition.
Electrical installation to be designed and installed and tested on completion by an NICEIC registered contractor in accordance with BS 7671:2001 to comply with Part P of Building Regulations.

Notes
These drawings are for the purpose of obtaining Building Regulations and Planning permission only.
All work thereafter is undertaken solely at the clients/contractors discretion and liability is therefore transferred. With regards to any matters relating to Planning or Building Regulation, they are solely at the discretion of the client, no information or advice given prior to or after the drawings are completed are for information only and not binding.
All work must be carried out in accordance with the relevant building regulations and codes of practice. Do not scale from drawing. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately.
Services i.e. Electric, heating, plumbing etc. Are not included in these drawings.





PROJECT
PROPOSED SINGLE STOREY REAR EXTENSION, INTERNAL ALTERATIONS AND REAR DORMER.
DRAWING TITLE
PROPOSED ELEVATIONS, ROOF AND SITE PLAN.
CLIENT
MRS. D. LORD.
ADDRESS
48, CHELTENHAM ROAD
ALKRINGTON, MIDDLETON.
M24 1HG.
SCALE
SCALE 1:50
DATE
APR 2019.
DRAWING No
RC 04195450/3.