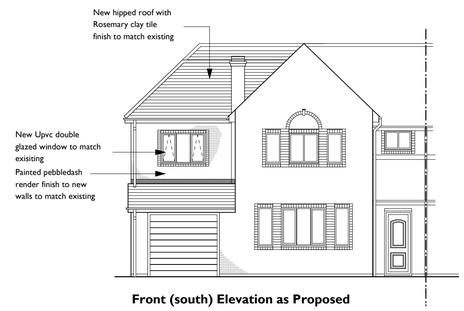
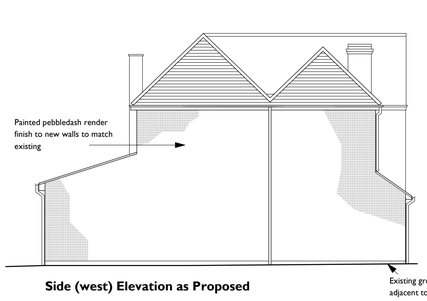
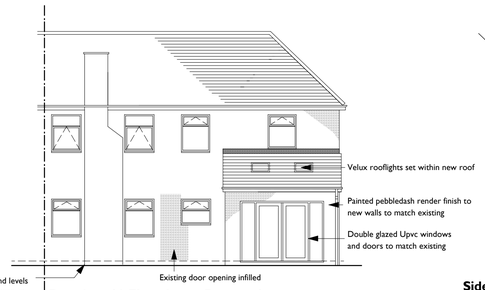


Front (south) Elevation as Proposed

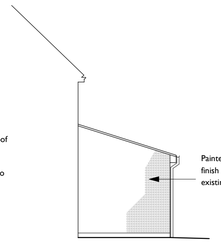
Scale 1:100



Side (west) Elevation as Proposed



Rear (north) Elevation as Proposed



Side (east) Elevation as Proposed

Foundations
•New foundations to be strip footings of 1:2:4 mix concrete, 600x225mm deep to new cavity walls at a minimum depth of 1000mm below adjacent ground level.
•All foundations to be to the satisfaction of the local authority.

Ground Floor
•To achieve a U value of 0.22w/m2k
•New floor to to be 65mm sand / cement screed with wire mesh reinforcement on 70mm Celotex GA4070 insulation on 100mm O/S concrete on 1200 gauge Visqueen DPM on 150mm sand blinded, well compacted hardcore. Insulation boards to be overlaid with min 500 gauge polythene vapour control layer.
•Provide 20mm thickness Celotex TB4020 perimeter insulation to full depth of floor screed to eliminate cold bridging.
•All joints in DPM to be properly lapped and sealed. New floor to be at same level as existing house.

New External Walls
•To achieve a U value of 0.28 w/m2k (minimum requirement)
•Cavity walls to be pebbeldash render finish on 100mm Thermalite Shield outer leaf, 100mm cavity partially filled with 45mm Celotex CW4045 cavity insulation board (or similar approved) and 100mm Thermalite Shield blockwork inner leaf with 12.5mm plasterboard on dabs to internal face.
•Provide S/S wall ties to BS 1243:1978 at 450mm vertical and 900mm horizontal centres (staggered)
•Walls upto Dpc are to be 102mm semi-engineering bricks with a 100mm cavity filled with lean mix concrete upto ground level and dense concrete blockwork inner leaf.
•Provide insulated DPC's to all openings within cavity walls using Type H1 cavity closers by Cavity Trays Ltd.

New Internal wall between kitchen & Garage
•To achieve a U value of 0.28w/m2k (minimum requirement)
•Wall to be constructed using 150mm Thermalite Shield block with 67.5mm Celotex PL4065 insulation/plasterboard applied to plasterdabs on kitchen face of wall, provide plaster skim to finish. All joints to be taped and sealed in accordance with manufacturers recommendations.

Roof to single storey extension
•To achieve a U value of 0.18 w/m2k
•Roof pitch to be 17.5deg
•New roof construction to be Redland Mini Stonewold roof tiles in colour to to match existing roof, on 38x25mm SW battens on Kingspan nilvent breathable sarking membrane on 47x150mm C16 t.sw rafters at 450mm centres. Rafters to be supported at eaves on 100x75mm SW wallplate. Wallplate to be strapped down to walls using 1200x300x6mm MS straps at 900mm centres. Rafters to be doubled up around rooflight positions.
•Provide 120mm Celotex XR4120 insulation between rafters and 20mm Celotex TB4020 insulation to underside of rafters finished with 12.5mm Knauf wallboard and skim.
•Provide minimum code 4 lead apron flashing at abutment of wall with new roof, 75mm minimum upstand turned into brickwork joint by 25mm and wedged at 450mm c/s. Apron to extend down roof slope by at least 150mm.
•Provide new sw fascia and soffit boards to match existing.

Roof to two storey extension
•To achieve a U value of 0.16 w/m2k
•Roof pitch to be approx 44deg to match existing house.
•New roof construction to be Redland Rosemary clay roof tiles in colour to to match existing roof, on 38x25mm SW battens on untearable sarking felt on 47x125mm C16 t.sw rafters at 450mm centres. Rafters to be supported at eaves on 100x75mm SW wallplate. Wallplate to be strapped down to walls using 1200x300x6mm MS straps at 900mm centres.
•Provide 47x195mm C16 t.sw ceiling joists at 450mm centres with 12.5mm plasterboard and skim to underside with 150mm Rockwool timber roll insulation laid between joists and 100mm laid over joists.
•Glidevale RV' (or similar approved) rafter ventilators to be provided to ensure a continuous ventilation path and cross ventilation from the eaves to the roof space, leave air gap at eaves equivalent to a continuous strip 10mm wide.
•Provide new sw fascia and soffit boards to match existing.
•Min. 125mm lead valley gutter to be formed between roof slopes in min code 4 lead, dressed in lengths not exceeding 1.5m all in accordance with Redland standard details. Valley gutter to be laid to fall into new gutter running along side elevation of extension

Canopy roof to Garage
•Roof pitch to be 35deg
•New roof construction to be Redland Rosemary Clay roof tiles in colour to to match existing roof, on 38x25mm SW battens on untearable sarking felt on 47x100mm C16 t.sw rafters at 450mm centres. Rafters to be supported at eaves on 100x75mm SW wallplate. Wallplate to be strapped down to walls using 1200x300x6mm MS straps at 900mm centres.
•Provide new 47x100mm C16 ceiling joists as indicated beneath canopy roof.
•Provide minimum code 4 lead apron flashing at abutment of wall with new roof, 75mm minimum upstand turned into brickwork joint by 25mm and wedged at 450mm c/s. Apron to extend down roof slope by at least 150mm.
•Provide new sw fascia and soffit boards to match existing.

First Floor
•To achieve a U value of 0.22w/m2k (minimum requirement)
•Provide new 47x170mm t.sw floor joists at 450mm centres with 22mm chipboard over (min mass 15kg/m2) with 12.5mm Gyproc Fireline plasterboard or similar approved (min mass to be 10kg/m2) and skim ceiling to underside. Provide 100mm Celotex FR4000 insulation between joists (min mass to be 10kg/m3).

New Internal Stud Partitions
•To be constructed using 50x75mm tsw studs at maximum 450mm centres provide an absorbent layer of quilt insulation (minimum thickness 25mm, minimum density 10kg/m3) suspended between studs. Provide 1 layer of 12.5mm plasterboard - Gyproc Wallboard TEN or similar approved (min mass to be 10kg/m2) and skim to both faces.

Ventilation
•New windows to provide trickle ventilation of 8000mm2 to habitable rooms and 4000mm2 to all other rooms.
•New en-suite bathroom to have mechanical extract capable of extracting 15 litres /sec.
•Provide cooker hood or mechanical extractor fan within kitchen area capable of extracting 30 litres / second (adjacent to hob) 60 litres / second if situated elsewhere.
•New ground floor wc to have mechanical extract capable of extracting 6 litres / sec with 15 minute overrun facility.
•Allow for extending ventilation of existing ground floor construction via new 100mm dia ductwork laid within new floor, terminating at airbricks above external ground level.

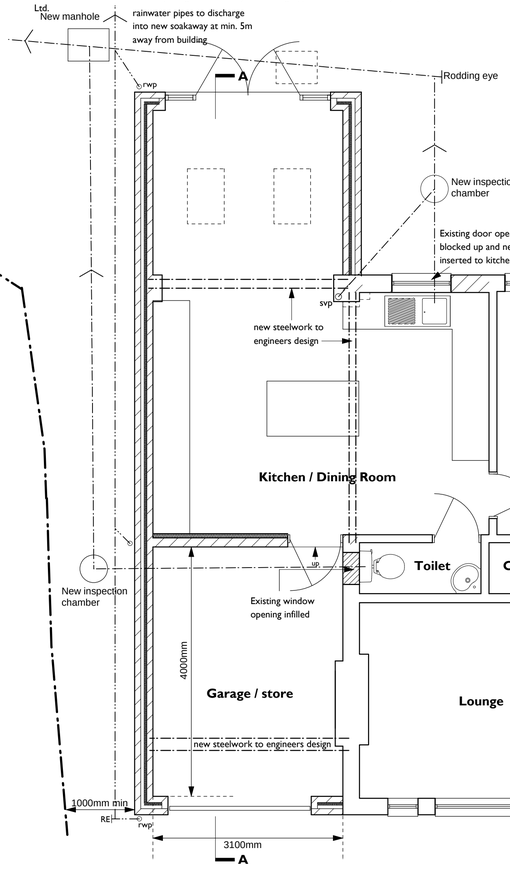
Glazing
•New windows,doors and Velux rooflights to achieve a U value of 1.6w/m2k, to be upvc with toughened safety glass as necessary in accordance with Doc N of the Building Regulations.
•Window to new bedroom to be an escape window with an unobstructed openable area of at least 0.33m2 and at least 450mm high x 450mm wide.
•Windows and doors will have draught stripping and the building will be built in an airtight manner.

Drainage
•Provide new 100mm half round Upvc gutters with 75mm downpipes to extension as indicated.
•New rainwater pipes to connect to new soakaway at a minimum of 5m from any foundations. New rwp's to have roddable access gullies.
•**NOTE** : Allowance is to be made for carrying out of percolation tests to determine the size and construction of the new soakaway, all in accordance with Building regulation requirements and procedures.
•Drains to be laid at minimum falls of 1:40.
•Existing drains running beneath new extension to be encased in concrete, to the satisfaction of the Local Authority.
•Concrete lintols are to be provided where drains pass through walls.
•Provide new 40mm dia. waste with 75mm DST from new kitchen sink position, connected from new external roddable back inlet gully into existing foul drain via new manhole and 100mma pipework and as indicated. Existing manhole position is to be backfilled
•Drainage to new en-suite - Provide internal 100mm SVP to new en-suite (postion to be agreed) to drop down within pipework boxing into kitchen and connect into new / existing foul drainage run. Provide 100mm dia waste from WC to connect into new SVP. New SVP to terminate within roof space - provide air relief valve to top. Provide new 40mm waste with 50mm DST to shower and 40mm waste with 75mm DST to washbasin, all connecting into new SVP drop. Drainage pipework to existing bathroom is to be re-routed to discharge into new SVP drop.
•All new internal vertical pipework drops are to be adequately insulated against sound transmission.
•New ground floor WC to be installed, provide 100mm dia waste to WC and 40mm waste with 75mm DST to whb, all conecting into existing foul drainage system, subject to confirmation of drainage routes.
•EXISTING DRAINAGE ROUTES ARE TO BE CONFIRMED, AND CONNECTIONS TO BE TO FULL APPROVAL OF BUILDING CONTROL.

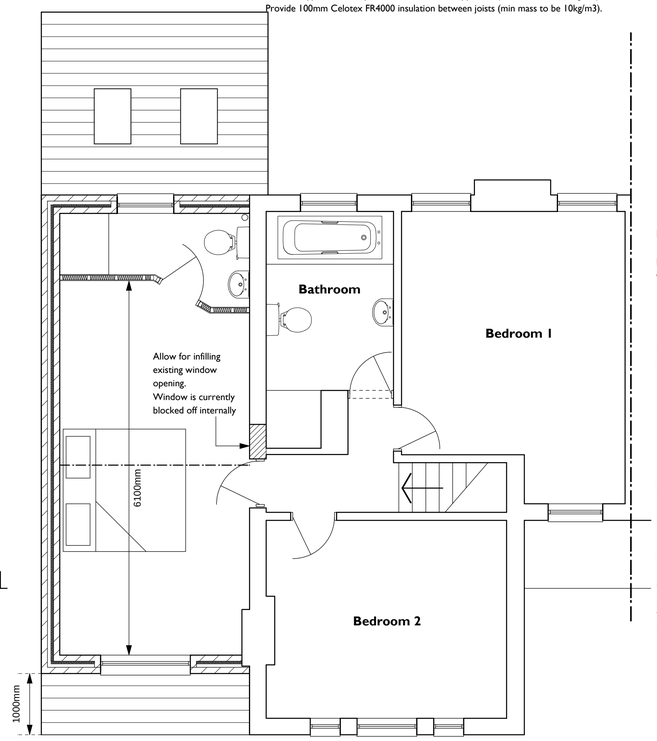
Lintels
•New lintels to be Catnic :
•CG90/100 lintels over new window / door openings to en-suite, bedroom and dining room.
•CGE90/100 lintel over new garage door.
•CN56XA lintel to new opening between garage and kitchen.
•All lintels to have minimum end bearings of 150mm unless indicated otherwise. Limit thermal bridging by providing insulation batts to all combination lintels in cavity walls.
•New steelwork to be provided in accordance with Structural Engineers design and calculation sheet no's 1 - ?? incl.

Services
•New radiators to be fitted with thermostatic radiator valves.
•New electrical installation to be in full accordance with part P of the Building Regulations. Electrical installation is to be in full accordance with and certified to BS 7671.

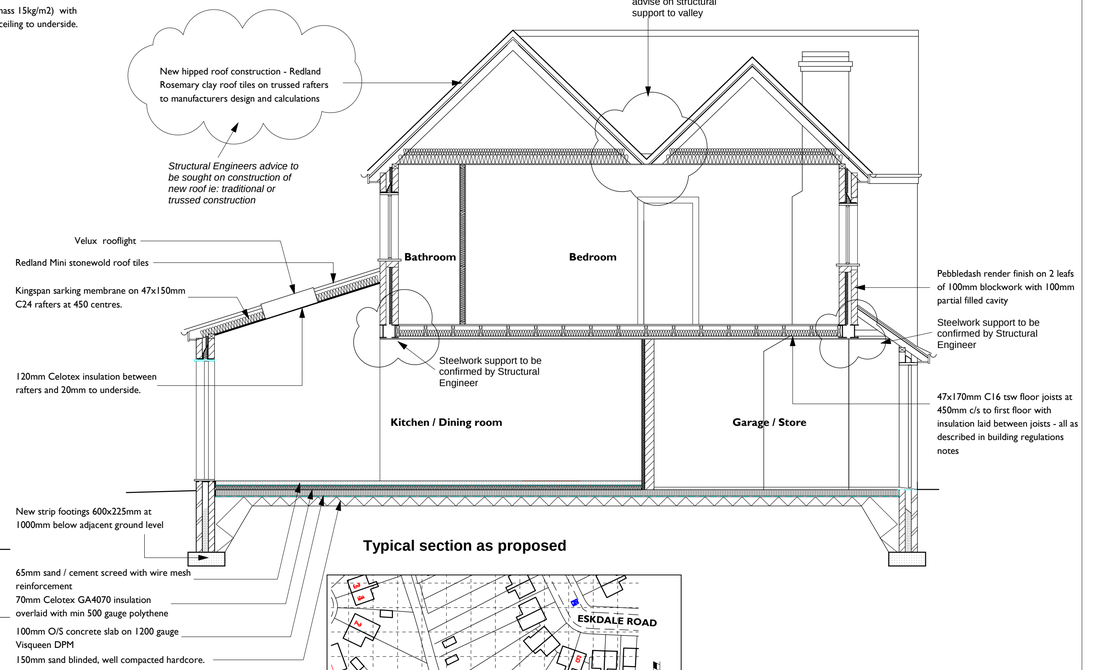
Energy Conservation
Continuity of insulation and air tightness
The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements and at the edges of elements such as those around window and door openings. Reasonable provision should also be made to reduce unwanted air leakage through the new envelope parts.
Therefore it is proposed to adopt design details such as those set out in the TSO Robust Details catalogue.



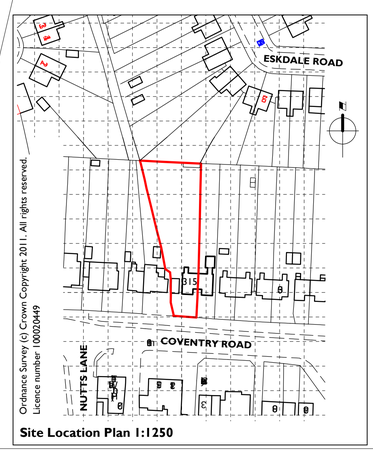
Ground floor as proposed



First floor as proposed



Typical section as proposed



Site Location Plan 1:1250

Schedule of Materials
•Side extension - New Rosemary clay roof tiles to match existing
•Rear extension - Mini Stonewold (or similar) roof tiles in colour to match existing main roof
•New painted pebbledash render to external walls to match existing.
•Contrast brickwork around window openings on front elevation to match existing.
•White Upvc windows and doors to match existing.
•Black Upvc rainwater goods to match existing.
•Soffits and fascias to match existing.

0 2 4 6 8 10 m

LINEAR SCALE (metres)

Rev B Oct 11 First floor plan amended
Rev A Sept 11 Amendments for Planning and Building regs notes added

Proposed side and rear extension at 315 Coventry Road, Hinckley, Leicestershire

Title : Plans & elevations as proposed

Scale : 1:50 / 100 (at A1)

Date : Sept 2011

Drawing Number : RG/RA/02B