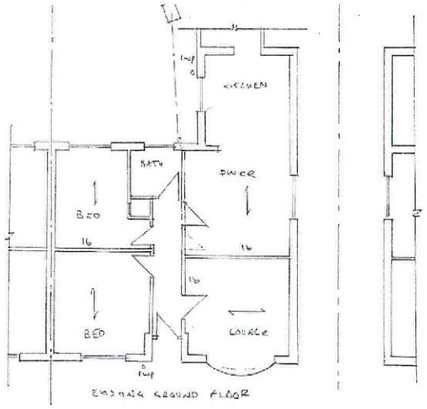
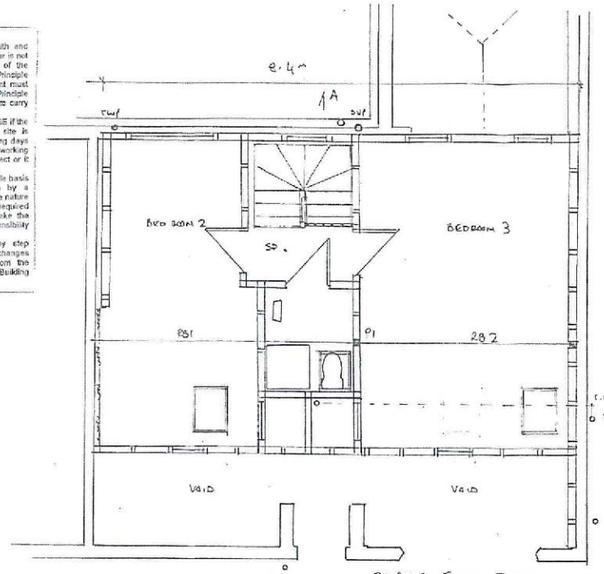


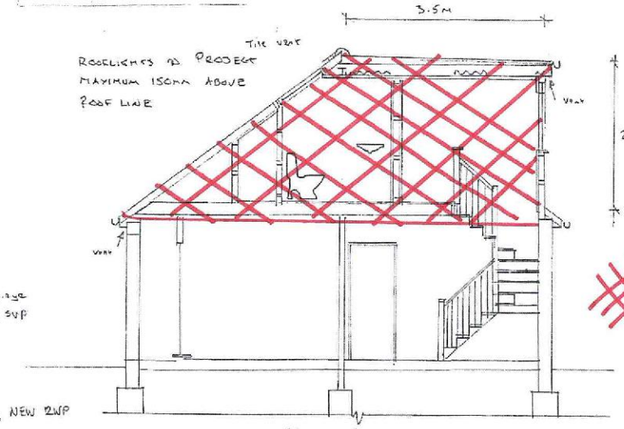
EXISTING GROUND FLOOR

Health and Safety Legislation.
These drawings form part of the health and Safety file under CDM 2015, the designer in not involved with the construction phase of the project therefore the involvement as Principle Designer has now ended and the client must pass these documents to the Principle Contractor and appoint them in writing to carry out their duties under CDM 2015.
Note that a project is notifiable to the HSE if the construction work on a construction site is scheduled to last longer than 30 working days and have more than 20 workers working simultaneously at any point of the project or it exceeds 500 person days.
These drawings are compiled on the sole basis that the works will be undertaken by a competent contractor experienced in the nature of the works shown hereon. All required temporary works necessary to undertake the proposals shown hereon are the responsibility of the Contractor.
These drawings are not a step by step instruction guide and in some cases changes may be required. Any deviations from the drawing must first be agreed with the Building Control body.



PROPOSED FIRST FLOOR

LOFT MASTER
www.loftmaster.co.uk



SECTION A-A.

not lawful

SCALE 1:50

SCALE 1:100

General
All works are to be undertaken in a 'workmanlike' manner with suitable and BRE approved materials and components. All to be in accordance with Building Regulations 2000 (as amended). No part of the sub – structure or super-structure should protrude over the boundary line. The designer is neither responsible for the works undertaken on site nor the manner in which any appointed contractor undertakes the works indicated. The internal layout and positioning of the internal doors and sanitary appliances in diagrammatic and shown for statutory approval purposes. The final arrangements and positions are subject to approval by the client. Any omissions, errors or changes on site are to be reported to the designer. Floor/ceiling and fascia/soffit/gutter levels to the new extension to line through with those of the existing property.

Scope of works
The scope of the works involve the formation of a loft conversion with a rear flat roof dormer and new gable end and creation of new ground floor bathroom.

Electric
The existing electricity system should be extended to the new parts of the accommodation by a qualified electrical engineer registered as a competent person in accordance with Part P of the Building Regulations. Installation and test certification will need to be given to the Local Authority Building Control Office in accordance with BS 7671. Switch and socket outlet positions to be agreed with the client. The new lighting system should be provided with 75% of fittings that can only take lamps having a luminous efficacy greater than 45 lumens per circuit watt.

Boiler
The existing boiler is unaffected by the proposals. To be checked by a Gasafe registered engineer to confirm adequacy for use in continuation with the loft conversion. Certification to be given to the Local Authority on completion and commissioning of the system. All pipe work should be insulated as necessary. Provide thermostatic radiator valves to the new radiators, positioned to the clients' request. Note boiler outlet and mechanical ventilation outlets must not project over the boundary.

Joinery
All skirting, door linings and architraves to be s/w profile to match existing, all adequately primed all round prior to fixing. Decorative finish subject to client approval and instruction.

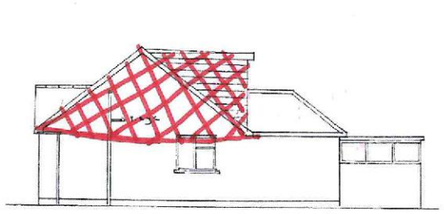
Party Wall Act 1996
Notices shall be served on adjoining owners when the work is relevant to the Act, and a party wall surveyor appointed. See Party wall booklet.

C.D.M. Regulations.
The contractor shall be aware of his/her obligations and responsibilities under the Health and Safety Executive CDM Regulations and a 'planning supervisor' appointed where required.

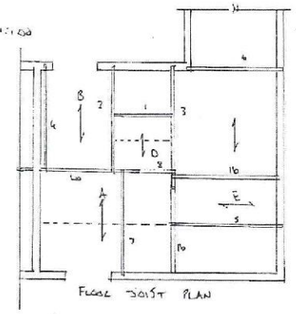
ALL EXTERNAL FINISHES AND MATERIALS ARE TO MATCH THE EXISTING IN COLOUR, TEXTURE AND APPEARANCE

EXISTING FRONT ELEVATION

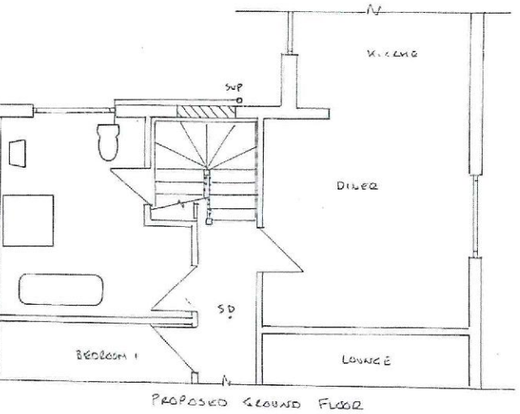
PROPOSED FRONT ELEVATION



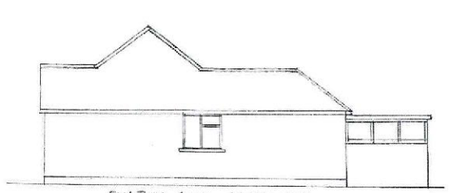
PROPOSED SIDE ELEVATION



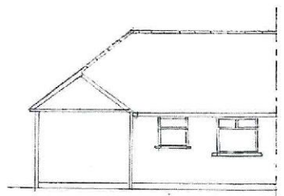
FLOOR JOIST PLAN



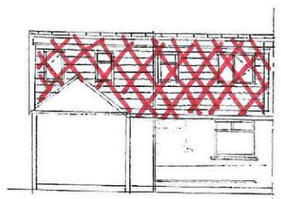
PROPOSED GROUND FLOOR



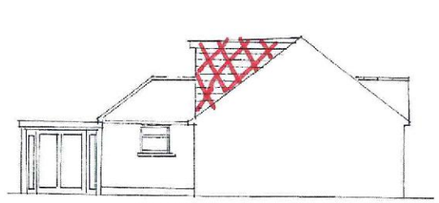
EXISTING SIDE ELEVATION



EXISTING REAR ELEVATION



PROPOSED REAR ELEVATION



PROPOSED SIDE ELEVATION

Beam Schedule

Dormer roof	-	147 x 47mm C24 @ 300mm centres
Ridge beam 1	-	150 x 90 PFC 24
Ridge beam 2	-	150 x 75 PFC 18
Floor joists span A-	-	195 x 75mm C24 @ 400mm centres
Floor joists span B and D	-	195 x 47mm C16 @ 400mm centres
Floor joists span C and E	-	195 x 47mm C24 @ 400mm centres
Floor beam 1,	-	2no 147x 47mm C24
Floor beam 2,	-	2no 195 x 75mm C24
Floor beam 3 & 4	-	2no 195 x 47mmC16 + 170 x 6mm plate
Floor beam 5	-	2no 195x47mmC24 + 170 x 10mm plate
Floor beam 6	-	152x 89 UB18
Floor beam 7	-	2no 195 x 47mm C16
Floor beam 8	-	2no 100 x 47mm C24

First floor joists
Provide new 195 x 47mm and 75mm C16 and C24 timber floor joists and doubles at 400mm centres as layout plan and calculations supported onto internal and external load bearing walls. All multiple joists should be bolted together with m16 bolts at 400mm centres, with double-sided tooth plate connectors. Existing lintels taking additional loads to internal openings should be exposed to ascertain their adequacy for the purpose. Provide central noggins to floor joists to prevent twisting where span exceeds 2.4m and ensure that the existing 100 x 50mm ceiling joists are securely strapped to the new floor joists where the binders are removed. Provide 21mm thick t&g boarding to the floor or equivalent with a minimum mass of 15 kg/m². Provide 100mm thick, 10 kg/m³ mineral wool sound insulation to the floor structure supported on chicken wire stapled to the sides of the new floor joists. Electrical cables should be fixed to the structure above the insulation to enable heat dissipation. Sound insulation work to the new floor structure should extend to the full width of the property and into the eaves. First floor joists to be packed off existing wall plates by 25mm. Floor joists connections onto the hanger via joist hangers as calculation details.

Dormer and gable walls
External dormer walls to be constructed in 100 x 50mm timber studwork with horizontal and vertical noggins. Provide 100mm x 50mm head and sole plates to all studwork construction. Dormer face to be braced with 12.5mm plywood and lined with breathable felt behind 25mm x 18mm timber battens to create air void. Provide 18mm render to B.S. 5262 on e.m.l. insulated between uprights with 80mm thick Celotex double R insulation with 25mm celotex to the internal face behind a 12.5mm plasterboard internal lining with a plaster skim. Dormer cheeks within 1.0m of the boundary to be lined both sides with 9.5mm supalux boarding or equivalent behind the plywood bracing. Provide lintel over the dormer windows as calculation sheet 20. Provide code 4 lead flashings and soakers to all roof abutments. Provide 25 x 18mm battens between the render finish and the plywood to provide a ventilated air gap where appropriate as may be requested by Building Control. Alternative dormer finish to be tile hanging on battens on breathable felt on plywood sheathing or hard-plank non combustible cement based cladding.

Dormer flat roof
Dormer roof construction of 3 layers of built up high performance hot bonded felt to B.S. 747 or single ply membrane installed in accordance with the manufacturers instructions on firring pieces fixed to fall at 1:100 pitch to rear on 147 x 47mm C24 flat roof joists at 300mm centres. Provide 120mm thick Celotex between the flat roof joists with 25mm thick celotex to the underside, fixed in accordance with the manufacturers instructions. Provide plasterboard lining and plaster skim to finish. The roofing felt should extend behind the ridge tiles to ensure weather-tight joint.
Provide ridge beams and calculations supported onto 100x100mm timber posts as detail. Note dormer roof or new ridge to be no higher than the existing ridge line.

Surface water drainage.
Provide 100mm dia. half round gutter to the new dormer roof and connect to the existing surface water drainage system by running onto the existing roof pitch with a proprietary shoe. Gutter to be laid to fall to 63mm dia. rainwater down pipes. Roof water from the main roof pitch to the existing rain water down pipe to the front and rear elevations. Provide a new 63mm diameter rainwater down pipe to the elevation as shown , connecting to a new trapped gully and 100mm diameter UPVC below ground drainage bed and surround in shingle laid to 1:80 fall to existing surface water drainage system – a conditional approval is requested for this matter.

Drainage
The new shower room to connect to the new SVP to the side elevation which is to connect to the below ground drainage system. 100mm diameter UPVC below ground drainage bed and surround in shingle laid to 1:80 fall to existing foul water drainage system – a conditional approval is requested for this matter. Provide a 100mm diameter stub stack with an air admittance valve to the top sited above the flood level of the hand basin. Drainage to run between the floor joists with rodding access to the bend to the branch drain prior to the connection to the SVP.

New appliances to connect to a new 100mm Diameter stub stack. The siting of appliances to the bathroom has yet to be agreed and is subject to clients approval. A conditional approval is requested for this matter and necessary associated below ground drainage alterations. In any case provide upvc waste pipes to new appliances with 75mm deep seal traps. 38mm diameter pipe work to wash hand basin and shower. Provide rodding eyes to waste bends. Proprietary 100mm diameter waste pipe to w.c. Ensure all pipework is adequately supported and clipped to an adequate structure. Pipework to be laid to appropriate falls to the SVP. Provide rodding eyes to all bends. SVP to terminate 900mm above any opening into the building.

New pitched roof.
New pitch roof to the front elevation is to be formed with tiles to match the existing on sw battens on breathable roofing felt fixed in accordance with the manufacturers instructions. Provide double rafters as trimming to the rooflights. Provide full length rafters where the hip is extended and insulation as before described.

Glazing
New external windows/rooflight to match existing and to be double-glazed to achieve a minimum 'U' value of 1.6 W/m^2 °C in UPVC frames. (16mm air gap with 'soft' low-E coating). Glazing to 'critical areas' to be safety glass to B.S. 6206:1981. Critical locations include any glazing within 800mm of the floor level in windows and 1.5m of the floor level in doors.

Ventilation
Ensure that the windows to the new bedroom achieves minimum 1/20th floor area ventilation with 8000mm² background ventilation. Provide 15 litres/second mechanical ventilation to the new shower room, ducted to the external air.

Means of escape provision.
Install mains operated and interlinked smoke detection to each level as shown. Provide mains operated and interlinked heat detection to the kitchen. Ensure the new bedrooms are provided with means of escape windows, i.e. minimum height and width of 450mm with an overall opening area of 0.33m². Bottom of the opening is to be between 800mm and 1100mm above the finished floor level. Provide a means of escape rooflight to the front elevation to bedroom 3 as shown, the bottom of the opening to be maximum 1100mm above the finished floor level.

Internal
Partitions to be 100 x 50mm treated s/w studwork at 400mm centres with horizontal noggins at 1200mm centres fixed both sides with a layer of 12.5mm gyproc wallboard with all joints taped and filled prior to plastering. Insulate internal studwork walls with 100mm fibreglass. Provide 100mm Celotex double R to exposed roof areas, to ashlar walls, to party wall partition construction. Provide beams below parallel studwork as layout plan. Provide 40mm thermal line insulated plasterboard to the party wall line. Load bearing studwork to be braced with 12.5mm plywood to one side.

Insulation to the sloping ceilings

Provide 50mm thick Celotex insulation between the rafters with 70mm to the underside fixed to the rafters. Ensure that a minimum 50mm air gap is achieved between the rafters. Plasterboard lining and plaster skim to the underside. Provide soffit ventilation to the front elevations and high level tile vents to encourage cross ventilation of the sloping ceiling areas.

Staircase specification.

Steps to the new staircase to have a rise of 190mm and a going of 220mm. The minimum going of the tapered treads is to be 50mm. Maximum pitch of the staircase to be 42°. Minimum headroom requirement throughout the length of the flight and to the landing areas is 2.0m. Provide a handrail to the length of the flight between 900 – 1000mm above the pitch line. Any balustrade to be minimum 900mm high, be non-climbable with no gaps in excess of 100mm wide. **Exact rise and going of each step to be calculated on site once floor levels set prior to the ordering of the staircase.**

Construction (Design and Management) Regulations 2015 (CDM 2015)

A domestic client is any individual who has construction work carried out on their home, or the home of a family member. THE CLIENT WILL PASSS HIS DUTIES TO THE:

- **The contractor, if it is a single contractor project, who must take on the legal duties of the client in additional to their own as contractor. In practice, this should involve little more than what they normally do in managing health and safety risks.**
- **The principal contractor, for projects with more than one contractor, who must take on the legal duties of the client in additional to their own as prime-pal contractor. If the domestic client has not appointed a principal contractor, the client duties must be carried out by the contractor in control of the construction work.**

Permited Development calculations

Dormer - 0.5 x (3.5 x 2.5) x 3.5 = 36.75m³

Hip extension (0.5 x (7.5 x 2.5) x 3.5)/3 = 12.25 m³

Total volume = 36.75m³ + 12.25 m³ = 49 m³

Client Approval
Signature: Date:

RECEIVED
21 01 2019
RECEPTION

MR AND MRS SNELLING

53 CORNHILL AVENUE
HOCKLEY
ESSEX
SS5 5BY

LOFT CONVERSION
PLANS, SECTIONS AND ELEVATIONS

SCALES : 1:50, 1:100

NOV 2018

53/CA/01