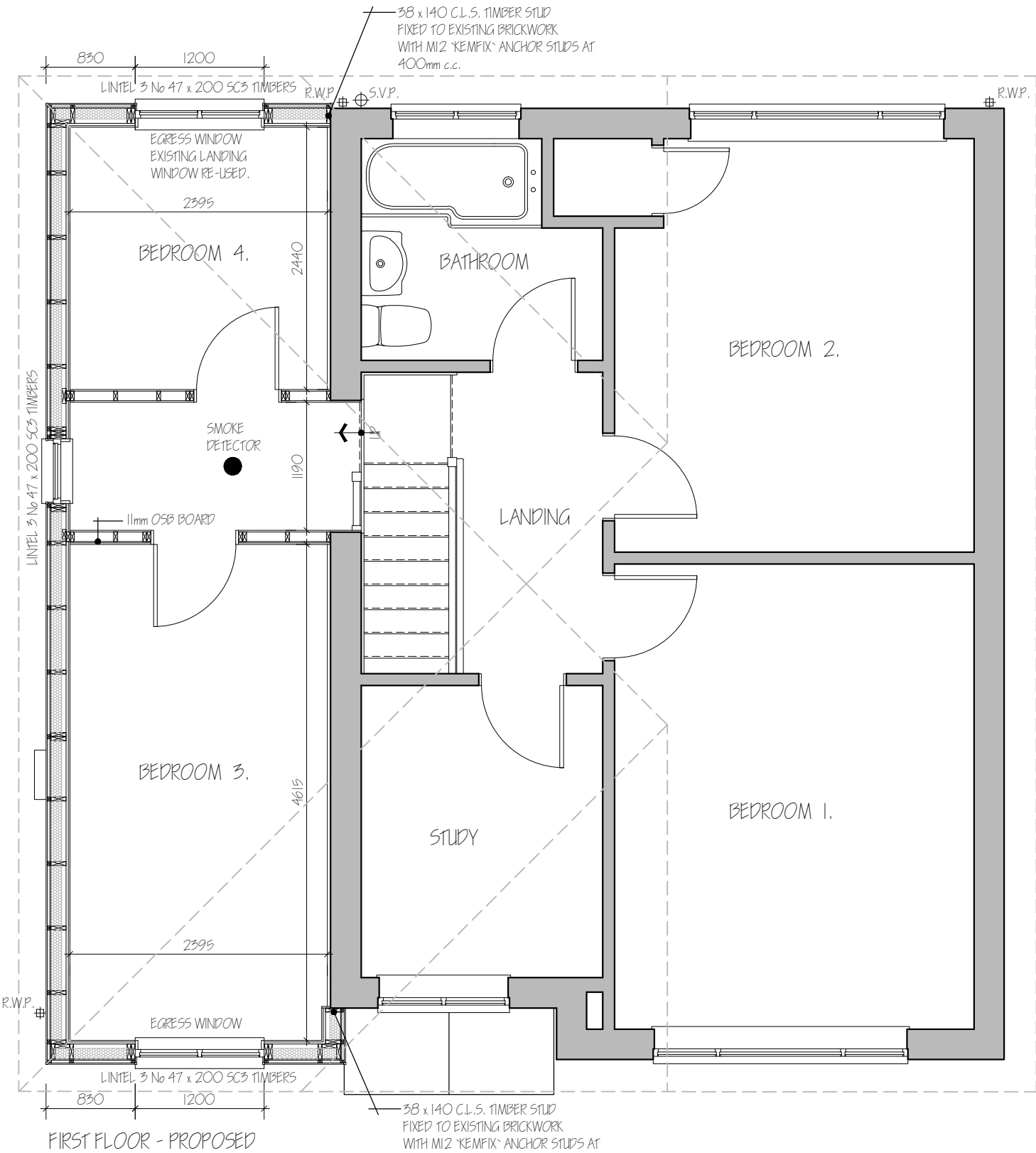
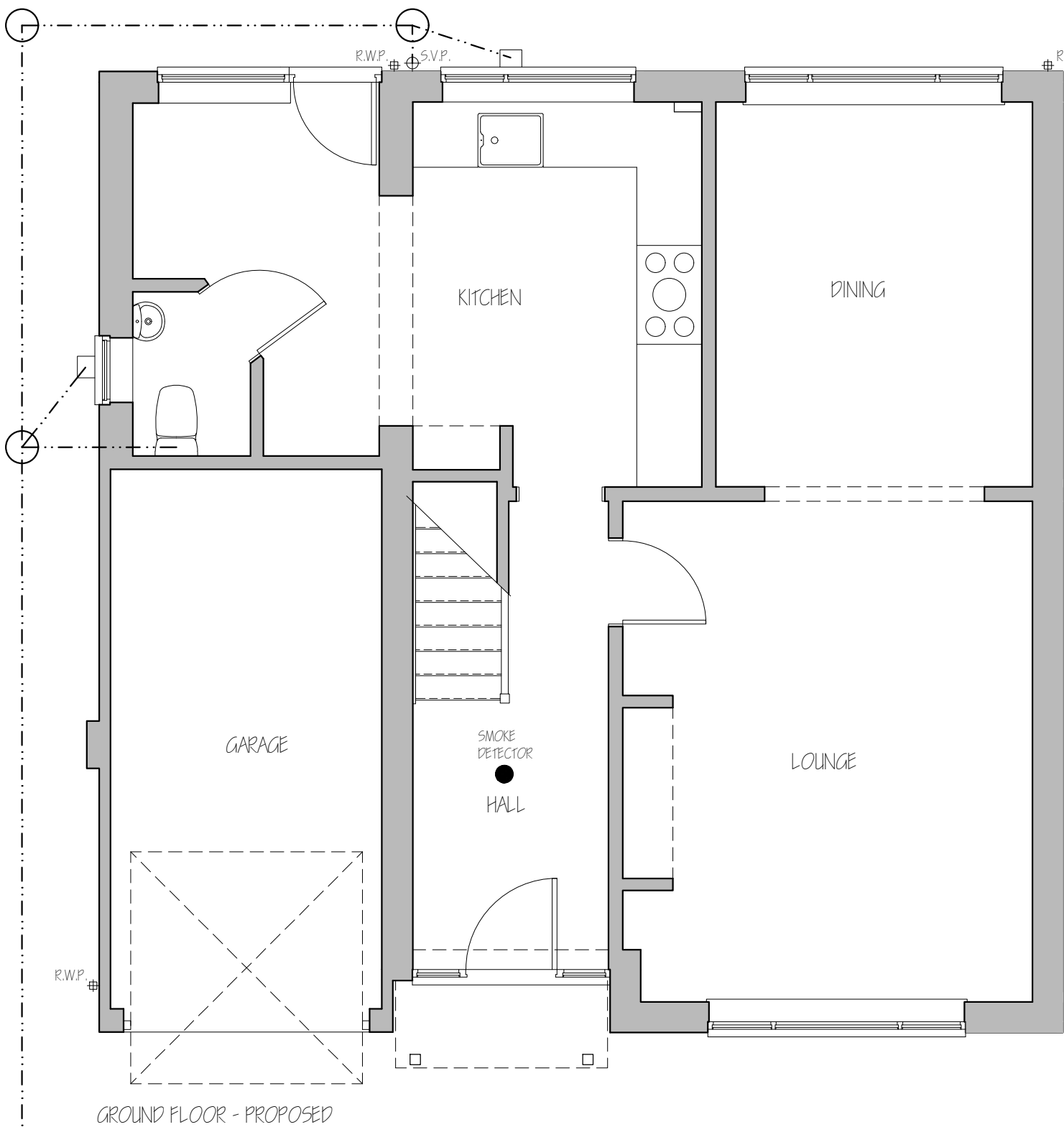
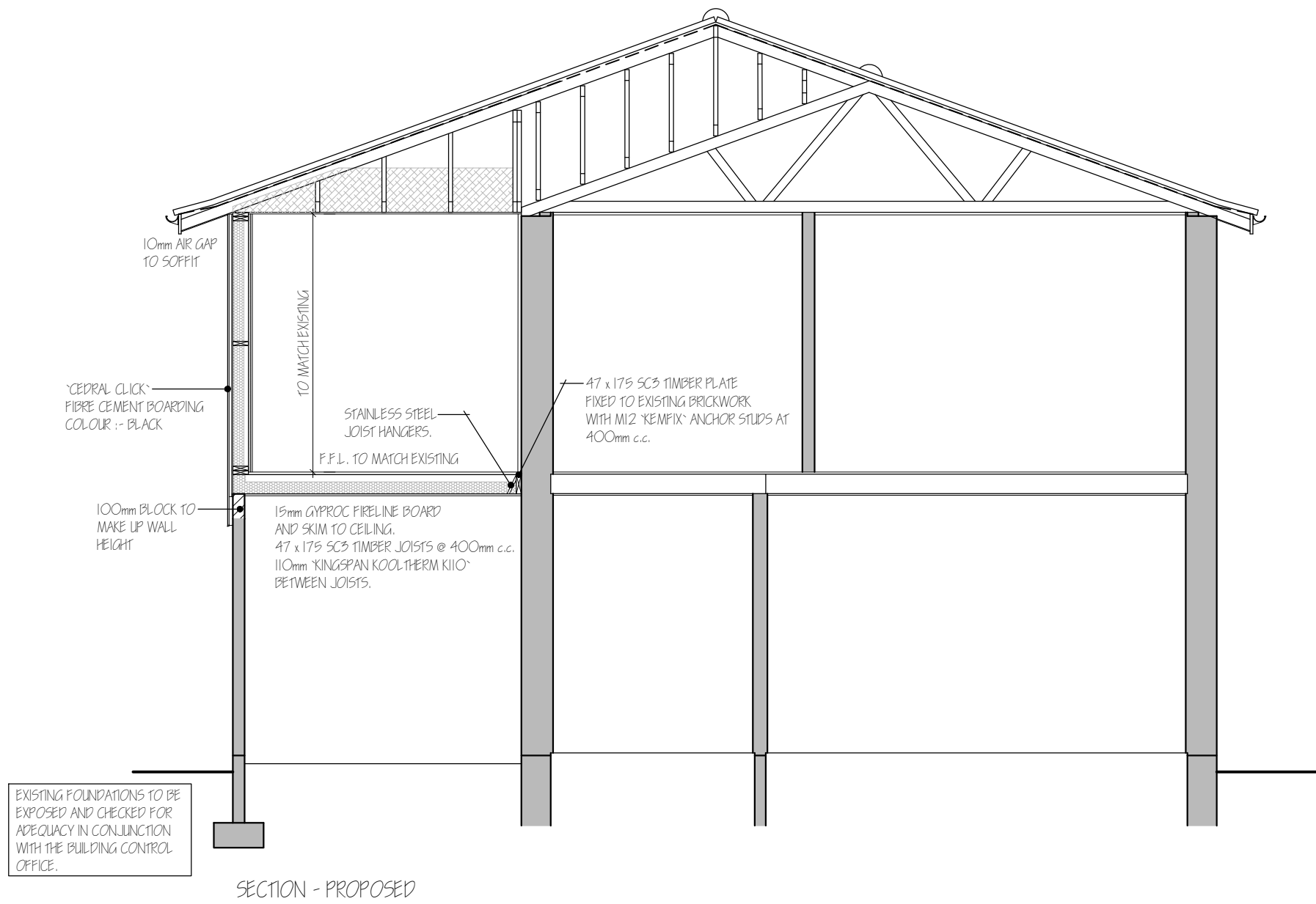
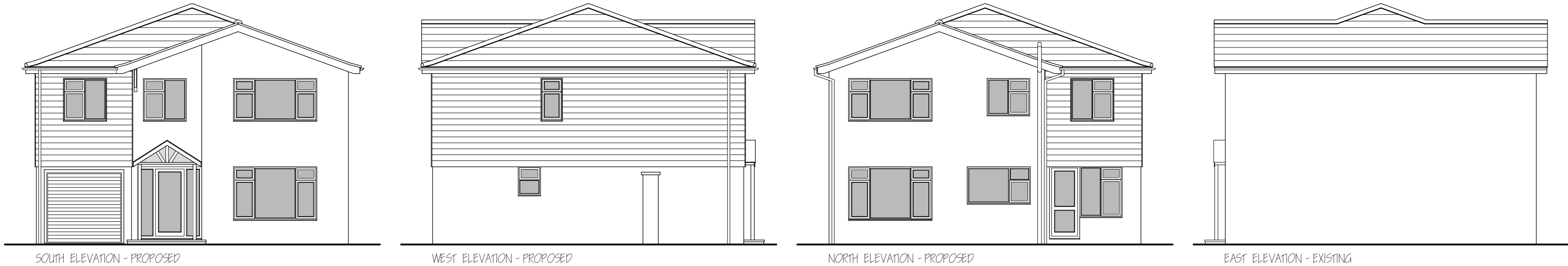




PITCHED ROOF CONSTRUCTION.
Concrete interlocking tiles to match existing to BS EN 490:2011.
Laid in accordance with BS 5554:2014 on 25 x 38 softwood treated battens on tuys® supa BBA certificate: 08/4548 or similar over rafter unsupported breather membrane fitted in full accordance with manufacturers instructions in all cases to be lapped by 150mm vertically and 300mm horizontally. Tiles to be laid with min. head lap of 75mm and to be fixed in accordance with request to wind speed, roof pitch and exposure category as detailed in BS 5599, Pt 2. Tynaplate specialist made prefabricated roof trusses to comply with BS 5268 part 3 1988, TR55 CALC 5 TO BE SUBMITTED TO L/A MIN. 28 DAYS PRIOR TO ERECTION. Trusses to be at 600mm c/c to a pitch to match existing. 38 x 100 ridge node binder 38 x 100 ceiling binders: All trusses to be strapped to wall plate by 20 x 2.5 galvanised metal straps acting as anchor and lateral restraint straps at max. 1.5m c/c. Note: provide solid bridging beneath straps: 50 x 100 wall plate bedded on sand and cement: 25 x 175 fascia boards: 6mm ext. grade plywood soffit complete with 10mm wide continuous air gap and fly proof screen: All structural timber to be min.5C5 grade, stamped 'D'RY' or 'KD' to indicate moisture content of 20% or less all in accordance with BS 4978. Where span of trussed rafter exceeds 5.0m provide additional bracing within the plane of the webs in accordance with Truss Plate Assoc. tech. bulletin sheet 4. At roof intersections provide 25 x 100 lag boards and diminishing trusses at 600 c/c.
Install GRP valley liner.

WALLING. (Timber Frame)
'Cedral Click' or similar Fibre Cement boarding on 25 x 38 treated timber vertical battens at 600mm c.c.
Kingspan Nilvent 17' Breather membrane: on 11mm OSB boarding on 38 x 140 c.l.s.climber studs at 600mm centres:
100mm 'Kingspan Kooltherm K12' insulation board between studs lined internally with 1000µ polythene vapour control layer and 32.5mm 'Kingspan Kooltherm K12' insulated plasterboard & skim.
'U' value 0.18 W/m2K
Internal walls to consist of 38 x 89 c.l.s. timber studs at 600mm centres, both sides to be clad with 12.5mm Suproc Soundloc and skim 25mm bowed Acoustic partition roll in fill between studs.

FIRST FLOOR CONSTRUCTION.
22mm T&G flooring grade chipboard on 47 x 175 5C5 grade joists stamped 'D'RY' or 'KD' to indicate moisture content of 20% or less all in accordance with BS 4978, at 400mm c.c.: 50 x 2.5 galvanised: steel anchor and lateral restraint straps to joist at max. 1.5m c/c straps to be run over min. 3No. joists with solid bridging beneath: Provide herring bone strutting min. 38 x 38 at mid span of joists where span exceeds 2.5m: Provide 2No. joists bolted together under all first floor walls where not supported on block work below. 100mm 'Kingspan Kooltherm K12' insulation board in fill between joists
All joists where built into external wall to receive mastic seal all round

SURFACE WATER DRAINAGE.
112mm dia. half round rainwater gutters to existing 68mm dia. rainwater pipes: To existing soak away min. 5.0m to edge from dwelling. All footpaths and drives to slope away from building.

EGRESS WINDOWS.
All habitable rooms in the upper story of a dwelling should have a window with an unobstructed openable area of at least 0.25 sq.m and at least 450mm wide x 750mm high (the route through the opening may be at an angle rather than straight through) The bottom of the openable area should not be more than 1100mm above floor level

GLAZING.
Double glaze property throughout with / pvcu windows BPERC rating in BAND C or better.
All windows and doors to have min. 'U' value of 1.4 W/m2K or better, i.e. 'Safe-Coban Glass UK Ltd PLANITHERM TOTAL + with 16mm air gap.
All glazing between F.F.I. and 800mm high and between F.F.I. and 1900mm high in doors and side lights to be safety glass to BS 6206. All windows/ doors to be draught sealed.

VENTILATION.
All windows to have opening lights that open to 30 degrees or more and to provide the equivalent of 1/20th the floor area of each room. Should opening lights be to less than 30 degrees provide the equivalent of 1/10th the floor area of each room. Background ventilation to windows to provide a minimum total of 60,000 mm. sq. permanent free air ventilation per dwelling. Passed upon a minimum of 5,000 mm. sq. per habitable room and 2,500 mm. sq. per kitchen, utility room, bathroom, en-suite, wet room and cloak room.
The following rooms to have in addition to the above wall mounted mechanical extractor fan (Specific Fan Power (SFP) to be no worse than 0.5 Wk/l/s): Recommended extract rates:
Kitchen min. 60 litres per second.
Utility rooms min. 30 litres per second.
Bathroom/ En-suite min. 15 litres per second, which may be operated intermittently and to have a 15-minute over-run.
W.C. min. 6 litres per second with 15-minute over-run.
Electrical Engineer to provide L/A Building Control with a suitable Commissioning Certificate upon completion.
Flow rate test results to be deposited with L.A Building Control no more than 5 days after final test.

SPACE HEATING.
Extend and upgrade existing system as required.
The heating system should be controlled by time and temperature zone controls with compatible delayed start thermostat. Time and Temperature control is defined as either A. Separate plumbing circuits, either with their own programmer, or separate channels in the same programmer Or B. Programmable TRV's or communicating TRV's that are able to provide time and temperature function.
Hot water system to be thermostatically controlled with timer switch.
Hot Water Storage - 250l HWSC declared loss, no greater than 1.67kWh/ 24hrs.
All hot water pipe work to be insulated to BS 5422:2001.
Heating flow rate temperature is to be between 36 - 45 Deg. C
Heating Engineer to provide L/A Building Control with a suitable Commissioning Certificate in accordance with that published as part of the Benchmark Code of Practice upon completion. And to confirm that the system has been designed and installed to the guidance of the BRE Trust report PB59
All un-vented hot water systems and packages to be fitted with a minimum of two independent safety devices, these shall be in addition to any thermostats provided on the system.
The system or package shall be reliably marked with the following details, which shall remain visible after installation.
a. The Manufacturers name and contact details.
b. The Model reference details.
c. The rated storage capacity of the storage water heater.
d. The operating pressure of the system and the operating pressure of the expansion valve.
e. Relevant operating data on each of the safety devices fitted.
f. The maximum primary circuit pressure and flow temperature of indirect hot water storage system units or packages.

SMOKE/HEAT DETECTORS.
Provide ceiling mounted mains operated self-contained Smoke Alarms to BS 5859-1:2015 in positions shown on plan.
Provide ceiling mounted mains operated self-contained Rate of Rise Alarms to BS 54-5 Type 'R' in positions shown on plan.
Detectors should be sited a maximum 3.0m from any Bedroom door and 7.0m from any other door. And be sited a minimum of 300mm from any wall or light fitting.
Where more than one detector is to be provided, they will be interconnected. All permanently wired to a separate fused circuit at distribution board.

ELECTRICAL INSTALLATIONS.
All electrical work to meet the requirements of Approved Document 'Part P (Electrical Safety)' and must be designed, installed, inspected and tested by a person competent to do so.
All electrical switches, socket outlets, telephone and TV. ports to habitable rooms to be positioned at appropriate heights between 450mm & 1200mm from F.F.I.
Electrical consumer units to be positioned so that switches are mounted between 1550mm & 1450mm above F.F.I.
Prior to completion of the works the Local Authority must be satisfied that either:-
An electrical installation certificate issued under a competent person's scheme has been issued.
OR
An appropriate installation certificate has been issued for the work and that it has been signed by a person competent to do so.

LIGHTING.
To all habitable rooms provide energy efficient light fittings capable only of taking lamps having a luminous efficacy greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens.
External lighting is to be fitted with Dism-Dusk or movement sensors and capable only of taking lamps having a luminous efficacy greater than 45 lumens per circuit.
All lighting to be in accordance with the Domestic Building Services Compliance Guide.

WATER
Provision is to be made for wholesome water to be drawn off wherever drinking water is drawn off. Also, to any wash basin, bidet, fixed bath or shower in any room containing a sanitary convenience.
Water of suitable quality is to be provided to all sanitary fittings with fitting devices. Pressure, flow rate and reliability to be sufficient for operating all sanitary appliances.
Potable water is to be supplied by any statutory water undertaker or licensed water supplier.
Potential consumption of wholesome water is to be limited to be not more than 115 litres per person per day. Water efficiency calculations are to be submitted to L/A Building Control not later than 5 days after work is completed.
Recommendations:
Bath 150 litre max capacity
Showers Flow Rate 10 litres/ minute
Taps Flow Rate 5 litres/ minute
W.C. Dual flush Full 6litre Half 5 litre
Washing Machine 5.1 litre/kg Dry Load
Dish Washer 0.9 litre/ place setting
Hot water supply to any fixed bath to be regulated to ensure maximum temperature of delivered water will not exceed 48 deg.C by the use of an inline blending valve or other appropriate device.

LIMITATIONS.
This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning/Building Regulation approval.
The drawing must not be used for any other purpose than above. All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes.
All given dimensions shall be checked by the Builder/Contractor and will be his responsibility from commencement of site works.
The works will not be supervised or inspected on site by C.A.D. or any representative thereof, it is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract etc. Also to ascertain sub-soil suitability prior to the construction of any foundations.

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STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fitted and installed etc. in strict accordance with manufacturers instruction and relevant Code of Practice.
Materials shall conform to appropriate British Standard Specification or BBA Certificate or European Code equivalent.

HEALTH & SAFETY.
The Employer/Client must ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places.
The Employer/Client is advised that should the works need to comply with the Construction Design and Management Regulations an independent Planning Supervisor will be required.

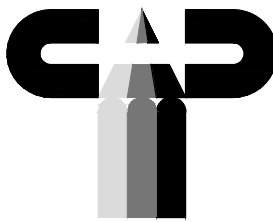
SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.

LABC CONSTRUCTION DETAILS
Available at -
www.labc.co.uk/registeration-schemes/constructiondetails

E1MCFP4	-	Lintel
E3MCFP4	-	Chill
E4MCFP4	-	Jamb
E5MCFP9	-	Beam & Block Floor
E5MCFP22	-	Floor Slab Ins. Under
E6MCFP4	-	Intermediate Floor
E10MCFP4	-	Eave - Flat Ceiling
E11MCFP4	-	Eave - Sloped Ceiling
E12MCFP4	-	Gable - Pitched Roof
E16MCFP4	-	Corner - Full Fill
E17MCFP4	-	Inverted Corner - Full Fill
E18MCFP7	-	Party Wall - Ext. Wall Junction
P1PCFF2	-	Party Wall - Floor Junction
P4PMCFP2	-	Party Wall - Roof Junction

ROOM DIMENSIONS ARE INTERNAL OF WALL FINISHES

revision	date	init.	revision details.



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Client. **MR & MRS K. BARFOOT**

Project. **PROPOSED EXTENSION
57 APELDOORN GARDENS
SPALDING
Lincs
PE11 1JT**

Drawing. **PROPOSED
FLOOR PLANS - SECTION - ELEVATIONS**

Scale	1:50 1:100 @ A1	Drawing No.	2212-02
Date.	MAY '22	Drawn.	J.C.