COLUMN A:
with 20mm thick end plates bolted to underside of new steel beam(s) above, and to concrete pad foundation below. 'Ancon Wall Ties' (or similar) to be used to anchor column to surrounding blockwork as detailed in manufacturer's instructions.

New pad foundation to be 1m2 (min) to suitable subsoil, 1000mm deep (min) if in clay, but at least to level of existing adjacent buildings and invert level of all drains passing within 1m of new works. Contractor to ensure all necessary temporary support, edge guarding and Personal Protective Equipment is provided to ensure the safety of all people at risk from this activity. Depending upon subsoil conditions, the foundations may need to be in excess of 1m deep in accordance with NHBC practice note 4.2. Foundations may require additional structural design in accordance with recognised guidelines for building close to trees should shrinkable sub-soils be encountered.

Notwithstanding the representation on the drawings, the foundations are to meet the requirements of the Local Authority in all respects.

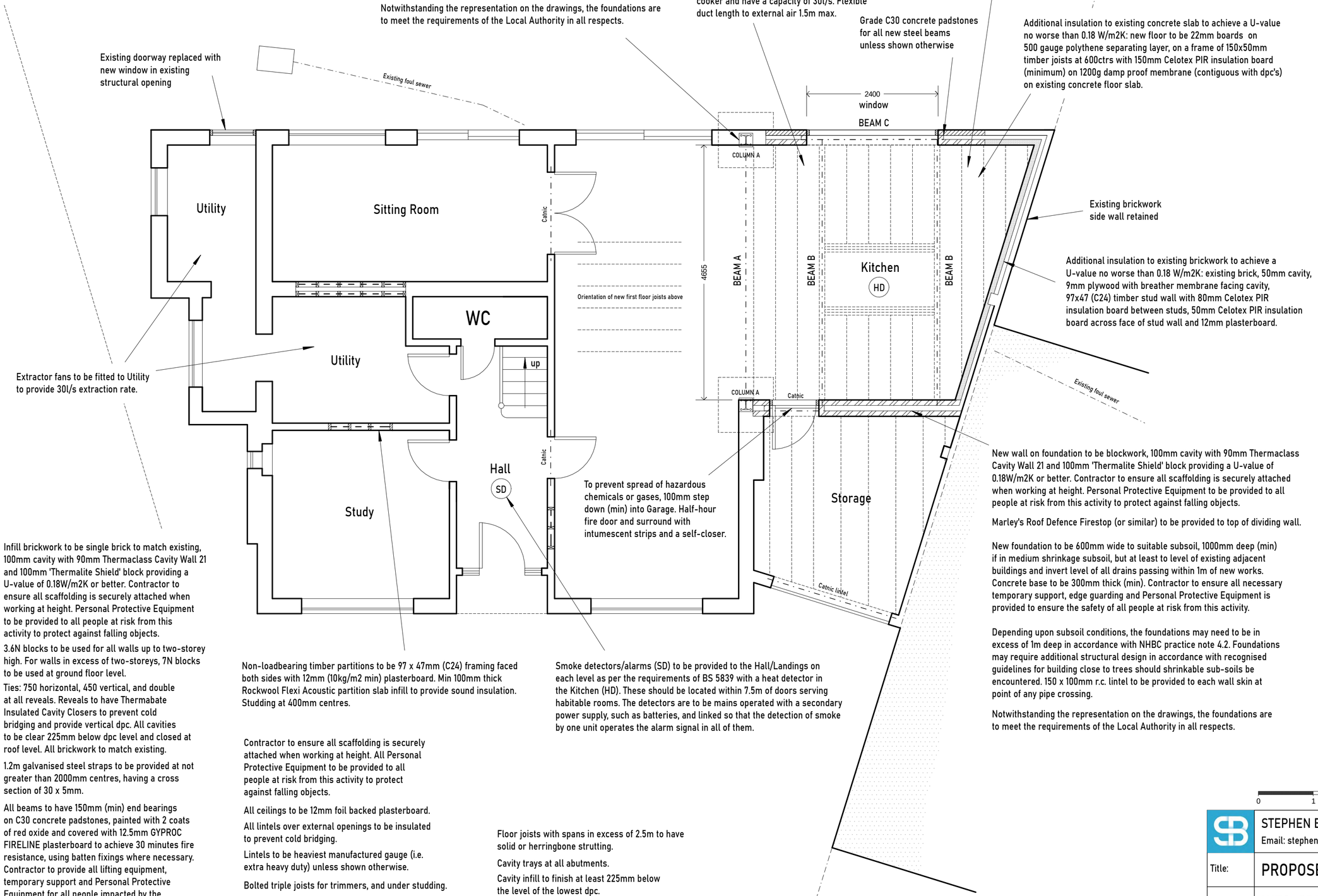
Flat roof (warm roof) construction to have a Broof(t4) membrane (e.g. 1.2mm EPDM membrane or similar) on 200mm Celotex PIR insulation board (to achieve 0.15W/m2K or better) on vapour control layer on **220 x 75mm** C24 joists at 400mm centres with tapered firrings and a 19mm exterior grade plywood deck with mushroom vents as required.

Extractor fan to be fitted to Kitchen to provide 60l/s extraction rate. If a cooker hood, it is required to span at least the full width of the cooker and have a capacity of 30l/s. Flexible duct length to external air 1.5m max.

Grade C30 concrete padstones for all new steel beams unless shown otherwise

Additional insulation to existing concrete slab to achieve a U-value no worse than 0.18 W/m2K: new floor to be 22mm boards on 500 gauge polythene separating layer, on a frame of 150x50mm timber joists at 600ctrs with 150mm Celotex PIR insulation board (minimum) on 1200g damp proof membrane (contiguous with dpc's) on existing concrete floor slab.

Existing doorway replaced with new window in existing structural opening



Additional insulation to existing brickwork to achieve a U-value no worse than 0.18 W/m2K: existing brick, 50mm cavity, 9mm plywood with breather membrane facing cavity, 97x47 (C24) timber stud wall with 80mm Celotex PIR insulation board between studs, 50mm Celotex PIR insulation board across face of stud wall and 12mm plasterboard.

Extractor fans to be fitted to Utility to provide 30l/s extraction rate.

To prevent spread of hazardous chemicals or gases, 100mm step down (min) into Garage. Half-hour fire door and surround with intumescent strips and a self-closer.

New wall on foundation to be blockwork, 100mm cavity with 90mm Thermaclass Cavity Wall 21 and 100mm 'Thermalite Shield' block providing a U-value of 0.18W/m2K or better. Contractor to ensure all scaffolding is securely attached when working at height. Personal Protective Equipment to be provided to all people at risk from this activity to protect against falling objects.

Marley's Roof Defence Firestop (or similar) to be provided to top of dividing wall.

New foundation to be 600mm wide to suitable subsoil, 1000mm deep (min) if in medium shrinkage subsoil, but at least to level of existing adjacent buildings and invert level of all drains passing within 1m of new works. Concrete base to be 300mm thick (min). Contractor to ensure all necessary temporary support, edge guarding and Personal Protective Equipment is provided to ensure the safety of all people at risk from this activity.

Depending upon subsoil conditions, the foundations may need to be in excess of 1m deep in accordance with NHBC practice note 4.2. Foundations may require additional structural design in accordance with recognised guidelines for building close to trees should shrinkable sub-soils be encountered. 150 x 100mm r.c. lintel to be provided to each wall skin at point of any pipe crossing.

Notwithstanding the representation on the drawings, the foundations are to meet the requirements of the Local Authority in all respects.

Infill brickwork to be single brick to match existing, 100mm cavity with 90mm Thermaclass Cavity Wall 21 and 100mm 'Thermalite Shield' block providing a U-value of 0.18W/m2K or better. Contractor to ensure all scaffolding is securely attached when working at height. Personal Protective Equipment to be provided to all people at risk from this activity to protect against falling objects.

3.6N blocks to be used for all walls up to two-storey high. For walls in excess of two-storeys, 7N blocks to be used at ground floor level.

Ties: 750 horizontal, 450 vertical, and double at all reveals. Reveals to have Thermabate Insulated Cavity Closers to prevent cold bridging and provide vertical dpc. All cavities to be clear 225mm below dpc level and closed at roof level. All brickwork to match existing.

1.2m galvanised steel straps to be provided at not greater than 2000mm centres, having a cross section of 30 x 5mm.

All beams to have 150mm (min) end bearings on C30 concrete padstones, painted with 2 coats of red oxide and covered with 12.5mm GYPROC FIRELINE plasterboard to achieve 30 minutes fire resistance, using batten fixings where necessary. Contractor to provide all lifting equipment, temporary support and Personal Protective Equipment for all people impacted by the installation of heavy steel beams, particularly when working at height.

Non-loadbearing timber partitions to be 97 x 47mm (C24) framing faced both sides with 12mm (10kg/m2 min) plasterboard. Min 100mm thick Rockwool Flexi Acoustic partition slab infill to provide sound insulation. Studding at 400mm centres.

Smoke detectors/alarms (SD) to be provided to the Hall/Landings on each level as per the requirements of BS 5839 with a heat detector in the Kitchen (HD). These should be located within 7.5m of doors serving habitable rooms. The detectors are to be mains operated with a secondary power supply, such as batteries, and linked so that the detection of smoke by one unit operates the alarm signal in all of them.

Contractor to ensure all scaffolding is securely attached when working at height. All Personal Protective Equipment to be provided to all people at risk from this activity to protect against falling objects.

All ceilings to be 12mm foil backed plasterboard.

All lintels over external openings to be insulated to prevent cold bridging.

Lintels to be heaviest manufactured gauge (i.e. extra heavy duty) unless shown otherwise.

Bolted triple joists for trimmers, and under studding.

All structural timber to be C24.

Code 4 lead flashings to be used throughout.

Floor joists with spans in excess of 2.5m to have solid or herringbone strutting.

Cavity trays at all abutments.

Cavity infill to finish at least 225mm below the level of the lowest dpc.

No development to overhang the boundary (incl. foundations).

PROPOSED ALTERATIONS TO:

6 Kelmscott Close
Caversham
Reading RG4 7DG

For: Mr W. Frank-Gemmill

This set of drawings has been produced to seek Planning and/or Building Regulation consent only (to determine whether construction is permitted to start), and does not represent a detailed specification. It is expected the proposals are to be constructed using tried and tested methods and techniques by a suitably competent and experienced contractor who is knowledgeable of the construction details not included on these plans. The contractor will also employ appropriately qualified staff familiar with this type of work and the site-wide construction risks. All works are to be carried out in accordance with Building Regulations, and according to Regulation 7; in a workmanlike manner using materials complying to relevant British Standards, BBA Agrement Certificates, Product Certification of Schemes, manufacturer instructions, and show relevant CE markings.

Any work carried out prior to the receipt of Planning and Building Regulations approvals is undertaken at the owner's risk and may be subject to alteration or removal, as requested by the Local Authority.

Contractor to provide all necessary temporary support and Personal Protective Equipment to ensure the safety of all personnel working at the site and to others at risk of being impacted by site activities. In particular when excavating foundations (whether services are present or not) and when lifting heavy loads.

Contractor to check all dimensions on site before commencing work.

No internal or external finishes were removed in preparation of plans, therefore, Contractor to check accuracy and adequacy of existing structure and foundations to receive proposed works as shown upon commencement of any excavation or removal of existing finishes.

No manholes were inspected prior to construction, therefore, contractor to determine location of all services prior to starting work on site (and to arrange any necessary approvals that may be required as a result of the proposals). The homeowner shall ensure the contractor is fully aware of any other risks associated with the site.

New structural steel connection details to be determined by the contractor's appointed steel fabricator/supplier

BEAM & COLUMN SCHEDULE

BEAM A:
203 x 203 x 71UC
with 10mm steel plate welded to top flange to support full width of wall above (if required)

BEAM B:
2no. 220x75mm timber joists (flitch beam)
with 10mm steel plate and M12 bolts

BEAM C:
152 x 152 x 23UC
with 10mm steel plate welded to underside to support outer bricks and door assembly

COLUMN A (supporting BEAM A):
152 x 152 x 30UC

metres
0 1 2 3 4 5

STEPHEN BIDDLE BSc CEng FICE
Email: stephen@sbiddle.co.uk Mob: 07864 122 313 Web: www.sbiddle.co.uk

Title:	PROPOSED GROUND FLOOR PLAN	Scale: (A2)	1:50
Drwg No:	WFG-0724-01	Rev:	F