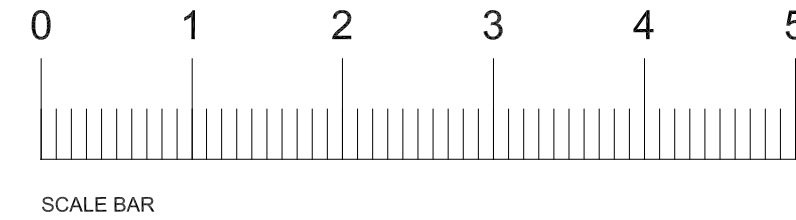
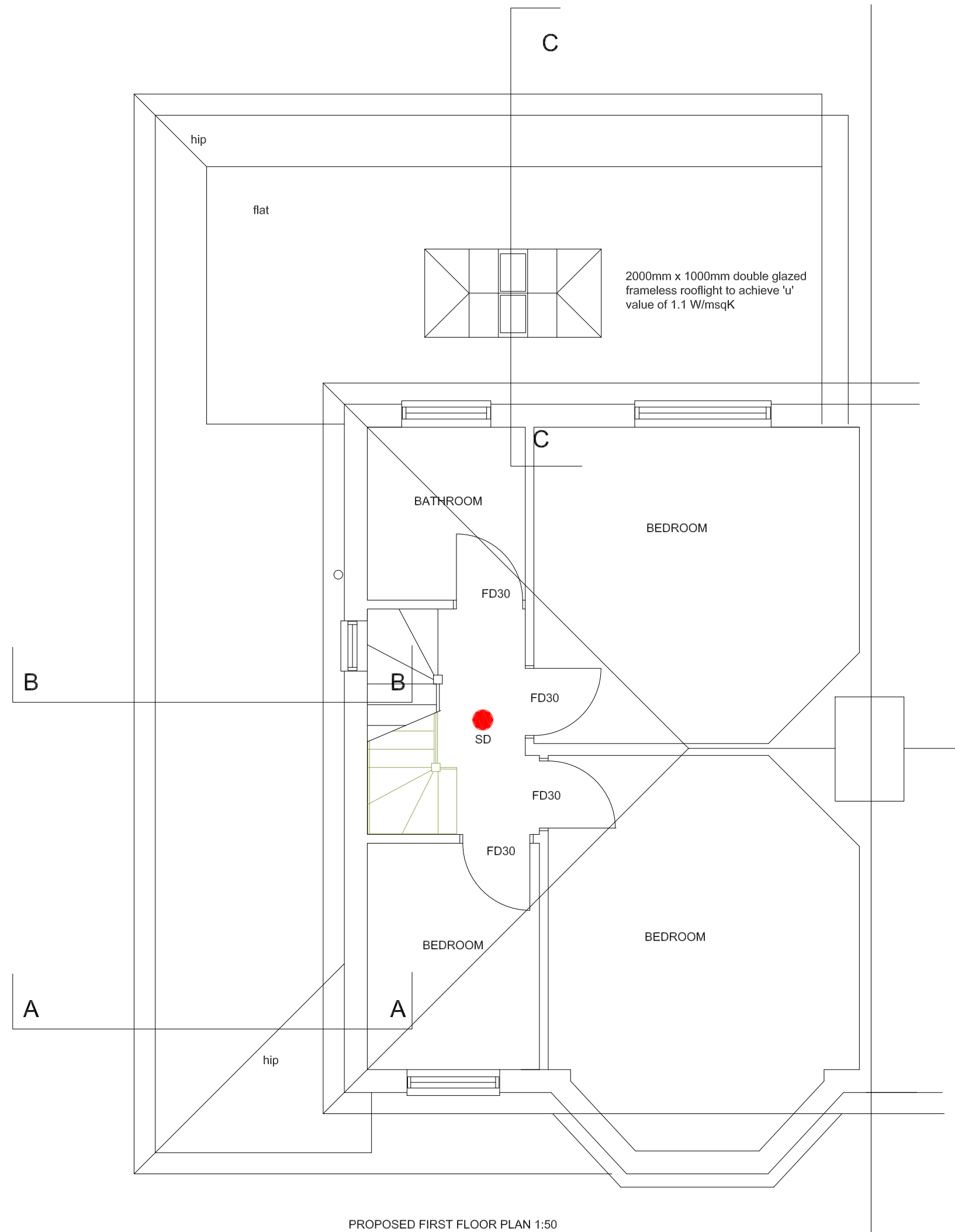


**EXISTING STRUCTURE:**  
Elements of the existing structure such as foundations and lintels are to be inspected by Building Control and are to be upgraded or replaced if found to be necessary.



PRIOR TO THE COMMENCEMENT OF ANY WORKS THE BUILDER IS TO CHECK AND/OR DETERMINE ALL CONSTRUCTION DETAILS INCLUDING CHECKING EXISTING SITE LEVELS AND DIMENSIONS. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER PROJECT DRAWINGS, CONSTRUCTION NOTES AND/OR PROJECT SPECIFICATION. ALL DISCREPANCIES SHOULD BE REPORTED IMMEDIATELY.

REV	DATE	DETAILS	DRAWN



**MECHANICAL VENTILATION**

The kitchens are to be provided with either a mechanical extractor capable of extracting at a rate not less than 60 litre/second, switched for intermittent operation or a cooker hood capable of extracting at a rate of 30 litre/second. Utility rooms are to be provided with mechanical extractor capable of extracting at a rate of not less than 30 litre/second. Bathrooms and cloakrooms are to be provided with mechanical extractors capable of extracting at a rate of not less than 15 litre/second for intermittent operation. Mechanical extractors at second floor level are to be ducted through the roof space, insulated as necessary, and to exit through tile/slate terminals. Internal cloakrooms and bathrooms to have a mechanical extractor capable of extracting not less than 6 litre/second operated via light switch with minimum 15 min overrun facility. Ducts serving extract fans in ground and first floor ceilings to be fitted with intumescent duct closer to provide a minimum half hour fire resistance. Fire dampers to be provided where ventilation ducts pass through fire resisting walls.

**SMOKE DETECTORS**

Each dwelling shall have a number of mains operated automatic self-contained smoke detectors with battery backup to BS 5446. There should be a smoke detector with 7.0m of the kitchen and living rooms and within 7.0m of bedrooms. There should be a least one detector on each level of accommodation within each dwelling. All units shall be interconnected such that detection by any one unit will operate all the alarms in the dwellings. All units to be installed in strict accordance with manufacturer's recommendations.

**FLASHINGS**

Flashings provided at all roof to wall abutments and around dormer windows etc: are to be code 4 lead soakers and code 4 lead flashings with minimum upstands of 150mm. Where applicable lead to be secured with wedges, clips and pointing. Cavity trays to be positioned above all lintels and openings and stepped at roof abutments.

**PLUMBING**

The internal plumbing is to comply with BS 552 utilising PVCu pipework comprising:  
110 mm dia soil and vent pipes, stub stacks.  
Minimum 100mm dia WC wastes.  
Minimum 40mm dia bath, shower and sink wastes (3.0m run max).  
Minimum 32mm dia basin and bidet waste (1.7 m run max).  
For basin and bidet wastes over 1.7m run, but not exceeding 3.0m run, increase waste pipe to 40mm dia.  
For bath, shower or sink wastes over 3.0m run, but not exceeding 4.0m run, increase waste pipe to 50mm dia. For wastes in excess of the above lengths anti-siphon or branch ventilating pipes are to be incorporated.

Combined bath and basin wastes to be 50mm diameter. Provide 75mm deep sealed traps to appliances. Waste pipes to have rodding points to provide access to any length of pipe that cannot be reached from any other part of the system. Waste pipes should be reasonably accessible for purpose of repair and maintenance.

SVPs and stub stacks to be provided with access points at ground level. Branch connections shall not discharge into stacks lower than 450mm above the invert of bend at foot of stack. Bends at foot of SVPs and stub stacks are to have a minimum radius of 200mm at the centre line. SVPs located at heads of drainage runs are to be terminate minimum 900mm above window heads where openings are within 3.0m of the pipe to avoid nuisance or health hazards. Terminals to be fitted to proprietary roof tile vents via a flexible pipes within the roof space. Other SVPs terminating below roof level are to be fitted with air admittance valves located above flood level of uppermost appliance level. Provide ventilation and access panels to all pipe casing at location of air admittance valves. Overflows from WCs to return into pan and water tanks to run in 19mm dia PVCu to outside walls. Casings to SVPs and stub stacks are to comprise 2 No layers of plasterboard on 38mm x 38mm sw framework to provide 1/2 hour fire resistance. Pipes to be insulated with minimum 25mm thickness glass fibre quilt within boarded ducts. Access points to be provided in pipe casings coinciding with access points in soil stacks. Fire stopping of mineral wool to be packed tight around pipes at intermediate floor levels.

Waste pipes:  
SVP 100mm dia to terminate 900mm above highest window head if within 3000mm of window or opening.  
bath 40mm, 32mm whb, combined waste, sink 40mm  
wc 75mm. All traps 75mm deep seal.  
waste pipes to fall approx 2.5deg to SVP, wc to fall 9mm/m run.

Steel beams to be encase in two layers of 12.5mm plasterboard to provide 1/2hour fire resistance.

**HEATING AND HOT & COLD WATER SERVICES**

Dwellings to be provided with gas fired fan assisted condensing boilers fitted with interlock with a minimum SEDBUK rating of 90%. System to be vented, gravity fed central heating system with water filled radiators and suitable hot water storage cylinder. Thermostatic radiator valves to be provided throughout and separate heating zones for ground and first floor. Heating zones to be no greater than 150m sq and to be controlled and timed separately. All pipework is to be insulated to comply with the requirements of Building Regulations Approved Document L1 and adequately sealed where it passes through ducts, hollow construction or voids. A set of operating and maintenance instructions for the heating and hot water systems are to be provided in an accessible format. Water installation to comply with current Water Authority Byelaws. Overflows or pressure relief pipes must discharge in accordance with system manufacturer's recommendations.

**BALANCE FLUES**

Flue pipes to be terminate in accordance with distances maintained as B.Reg. Para. 2.9. Diagram 2.

**COMMISSIONING CERTIFICATE**

Commissioning certificates for heating and hot water systems to be provided to the client and Building Control.

**ELECTRICAL INSTALLATION**

Electrical installation to be to the current I.E.E regulations and British Standard. Low energy light fittings to be provided that only take lamps having a luminous efficiency of 40 lumens per circuit-watt either one per 25m sq of floor area created or one per four fixed light fittings.

Flush fitting downlighters to be half hour fire rated as manufactured by Electro Technik Ltd.

External lights not exceeding 150W per fitting are to have P.I.R detectors to extinguish light when there is enough daylight or when light is not required at night. Lantern lights are to be controlled by Photo Electric Cell (PEC).

Switches and socket outlets to be positioned between 450mm and 1200mm above finished floor level.

All electrical work is to be carried out in strict accordance with BS 7671- the IEE current wiring Regulations for the design construction, inspection, testing and certification of the installation.

Electrical work to be carried out by a competent person registered with a Building Regulations Approved Document P self certification scheme. A competent person is to be registered with one of the following full competence schemes.

BRE Certification Ltd  
BSI  
ELECSA Ltd  
NAPIT Certification Ltd  
NICEIC Certification Services Ltd

Any contractor carrying out electrical work as an adjunct to their main trade i.e plumbing and heating contractor etc is to be registered with one of the following defined competence schemes.

Gas Safety  
ELECSA Ltd  
NAPIT Certifications Ltd  
NICEIC Certification Services Ltd  
OFTCC

Upon completion of the project the contractor is to ensure that sufficient information is provided so that any persons operating, maintaining or altering the electrical installation can do so in a safe manner.

Prior to the completion of the works an appropriate BS 7671 electrical installation certificate is to be issued to the Local Authority Building Control by a person deemed competent to do so.

**ELECTRICAL:**

All electrical works are required to meet the requirements of Part P (ELECTRICAL SAFETY) must be designed, installed, inspected and tested by a person competent to do so.

Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the works by a person competent to do so.

Energy efficient lighting is to be provided in accordance with Approved Document L.B. 3 in 4 light fittings is to be energy efficient, 45 lumens per circuit watt.

The Gas and Electrical installations are to be registered with the installers 'Competent Persons Scheme' within 30 days of the date of the final test/commissioning certificates. Works are to be registered before a completion certificate is issued in accordance with ADL1B and Building regulations 16A

Drawings to be read in conjunction with Structural Engineers drawings and calculations

● Provide interconnecting automatic mains operated fire detection system  
To be mains operated and interlinked with battery back up to Grade D Category LD3 standard, in accordance with BS 5839-6 (2004). An Installation and Commissioning certificate must be deposited with Building Control in accordance with Approved Doc, B Volume 1, Section 1.23

James. B.Langley Limited

Project:

Title:

7 Elm Way  
Ewell, Surrey  
KT19 0HB

Proposed First  
Floor plan



Tel: 020 8786 5753  
Mobile: 07976 712607  
e-mail: langley\_jb@yahoo.com

Building Surveying  
& Project Management

Scale: 1:50 @ A2	Date: NOV 2020
Drawing No	EW/102