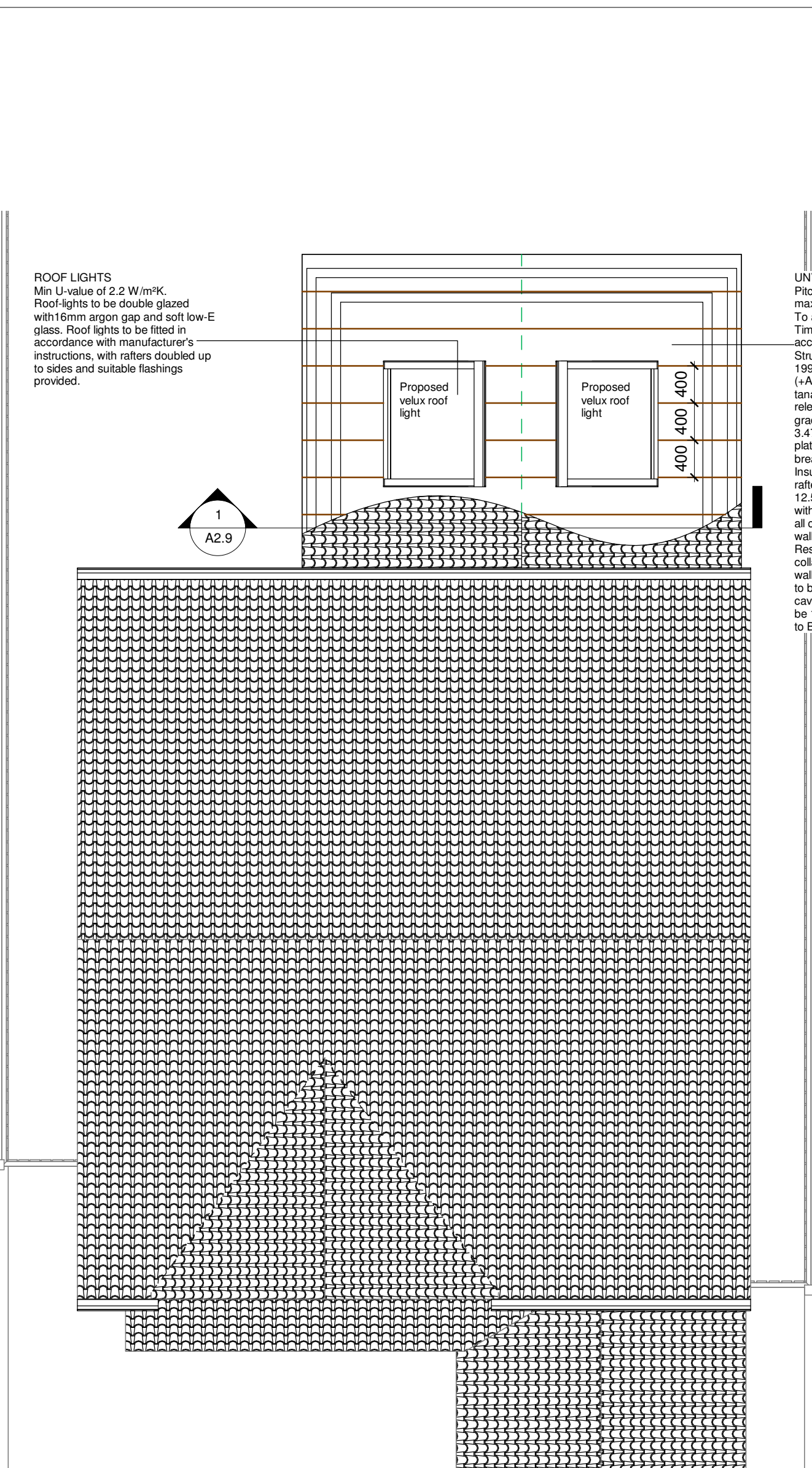
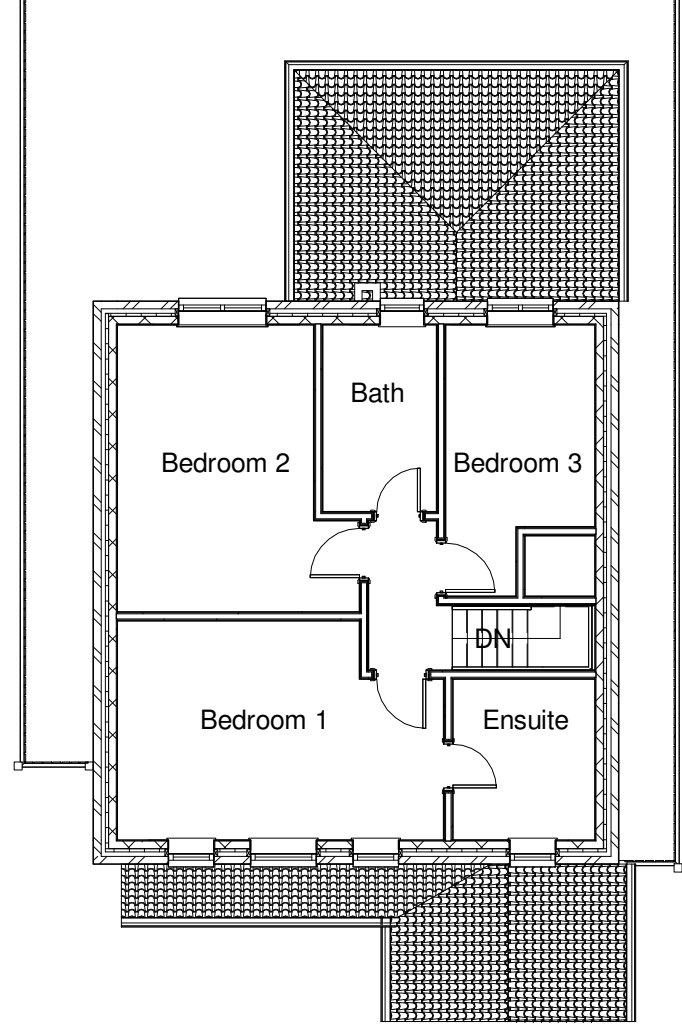
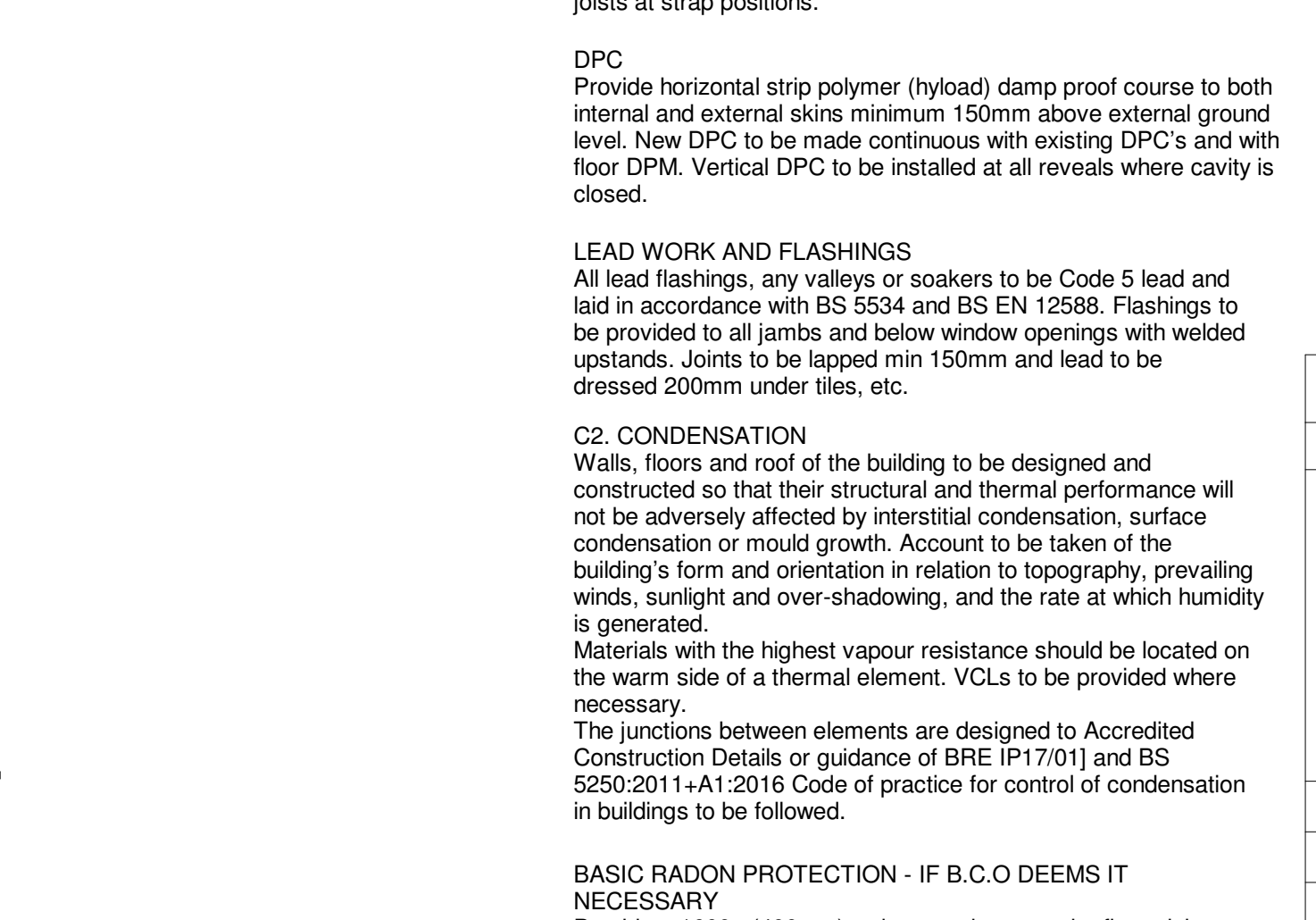




2 04 Proposed Roof Plan BR
1 : 50



4 02 Existing First Floor BR
1 : 100



5 04 Existing Roof Plan BR
1 : 100

SOLID FLOOR INSULATION UNDER SLAB
To meet min U value required of 0.18 W/m²K
P/A ratio 0.5

Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide a 1200 gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 90mm thick Kingspan Thermatrol TF70 insulation. 25mm insulating concrete screed over floor perimeter to avoid thermal bridge. VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 65mm sand/cement finishing screed with light weight reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

Where existing suspended timber floor air bricks are covered by new floor, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

SMOKE DETECTION

Mains operated linked smoke alarm detection system to BS EN 14604 and BS5839-6:2013 to at least a Grade D category LD3 standard and to be mains powered with battery back up. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/ storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

PIPES PASSING THROUGH TRENCH FOUNDATIONS
The load-bearing capability of foundations must not be affected where services pass through.
The pipe work should be sleeved and be provided with 'rocker pipes' at distance of 150mm either side of the foundation concrete. The 'rocker pipes' should have flexible joints and be a maximum length of 600mm.
Alternatively
Pipework should pass through a suitably strengthened opening in the foundation, i.e. foundation shuttered and a provided with suitable lintel over the opening, allowing for sufficient space for movement to ensure that the drain is capable of maintaining line and gradient. Opening should be masked with granular backfill (pea shingle) around pipe.
DPC to be provided as required by BCO.
Advice from Building Control to be sought on suitability of pipe running through foundation before construction.

ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

THERMAL BRIDGING
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

STRAPPING OF FLOORS

Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum of 3 joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid nogginns between joists at strap positions.

DPC
Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

LEAD WORK AND FLASHINGS
All lead flashings, any valleys or soakers to be Code 5 lead and laid in accordance with BS 5534 and BS EN 12588. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc.

C2. CONDENSATION

Walls, floors and roof of the building to be designed and constructed so that their structural and thermal performance will not be adversely affected by interstitial condensation, surface condensation or mould growth. Account to be taken of the building's form and orientation in relation to topography, prevailing winds, sunlight and over-shadowing, and the rate at which humidity is generated.

Materials with the highest vapour resistance should be located on the warm side of a thermal element. VCLs to be provided where necessary.

The junctions between elements are designed to Accredited Construction Details or guidance of BRE IP7/01 and BS 5250:2011+A1:2016 Code of practice for control of condensation in buildings to be followed.

BASIC RADON PROTECTION - IF B.C.O DEEMS IT NECESSARY
Provide a 1600g (400 um) radon membrane under floor slab lapped 300mm double welted and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes.

MATERIALS AND WORKMANSHIP

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking. Contractor to visit site prior to submitting tender or final quotation. Include in price all works necessary, contractor to clear site as per SITE PREPARATION note. Contractor to clearly identify to client all works not included in tender figure. Dimensions to be checked on site, contractor to identify any discrepancy between drawings and works and obtain client approval before proceeding and agree any additional costs to complete the construction. Site to be kept tidy at ALL TIMES, no refuse to be burned on site and contractor to agree working hours with client before commencement of works. Contractor to make good on all disturbed surfaces to match existing. All statutory site inspections to be seen and approved by Building Inspector prior to any covering up of works. No dimensions to be scaled off drawings.

TRENCH FOUNDATION
Provide 750mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206 and BS 8502-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed with the Client. Foundations to be constructed in accordance with BS 5400 and BS 8004 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or different loads, or any major roots in excavations, the leading Control Officer is to be contacted and the advice of a Structural Engineer should be sought.

ROOF CONSTRUCTION :
 Roof Covering fixed in accordance with manufactures details, recommendations and BS:5532, minimum 75mm headlap. Part 1 1978, on 35x38mm treated soft wood battens fixed to rafters using galvanised flat headed nails on breathable roofing membrane, lapped 150mm both horizontally and vertically and carried well into gutters. Roofing felt to be secured by galvanised cloud headed nails to rafters at maximum 600mm C/C to comply with BS:5268 Part 3 1985.

ROOF UNDERLAY:
Roofing underlay must comply with the newly introduced BS 5534. Use roofing underlay that has been tested to the new standard and clearly labelled and can be easily checked by NHBC Inspectors on site. Alternatively provide manufacturers evidence and proof that the underlay used is compliant with BS 5534.

EXISTING STRUCTURE
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

SITE PREPARATION

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

TIMBER:
All timber used on site to comply with A/D A1 B and to be stress grade SC3, moisture content. In accordance with TRADA. All roof timbers to be spaced at maximum 400mm C/C unless stated otherwise or indicated on plan. Rafters to be strapped to wall plate and all purlins where required or necessary.

BEAMS
Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance, as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

PARTY WALL ACT

The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if building work on, or to or near an existing Party Wall involves any of the following:

- Support of beam
- Insertion of DPC through wall
- Raising a wall or cutting off projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings

Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.

A Party Wall Agreement is to be in place prior to start of works on site.

CAVITY BARRIERS
30 minute fire resistant cavity barriers to be provided at at tops of walls, gable end walls and vertically at junctions with separating walls & horizontally at separating walls with cavity tray over installed according to manufacturers details.

NOTICE OF COMPLETION

A Notice of Completion to be given to Building Control not more than 5 days after the work has been completed. The notice to contain the following information:

- The name, address, telephone number and (if available) email address of the client, principal contractor, and principal designer.
- A statement from the applicant to say that the works have been completed and complies with all the applicable regulations to the best of their knowledge.
- A statement from both the principal contractor and principal designer to confirm they have fulfilled their duties under Part 2A (duty holders and competence).

WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845

REV		DATE	AMENDMENTS	Drawing measurements not to be obtained by scaling. Verify all dimensions prior to construction. Immediately report any discrepancies on this drawing to drawer.	
Drawing Number:		BR001			
Date Issued:		08/11/2024			
Project Description:		Proposed Single Storey Rear Extension			
Project Address:		11 Silvertown Grove Middleton M24 5JH		Drawn By	TB
				Checked By	TDG
Client Name:		Mr Steve Morgan		Scale	As indicated