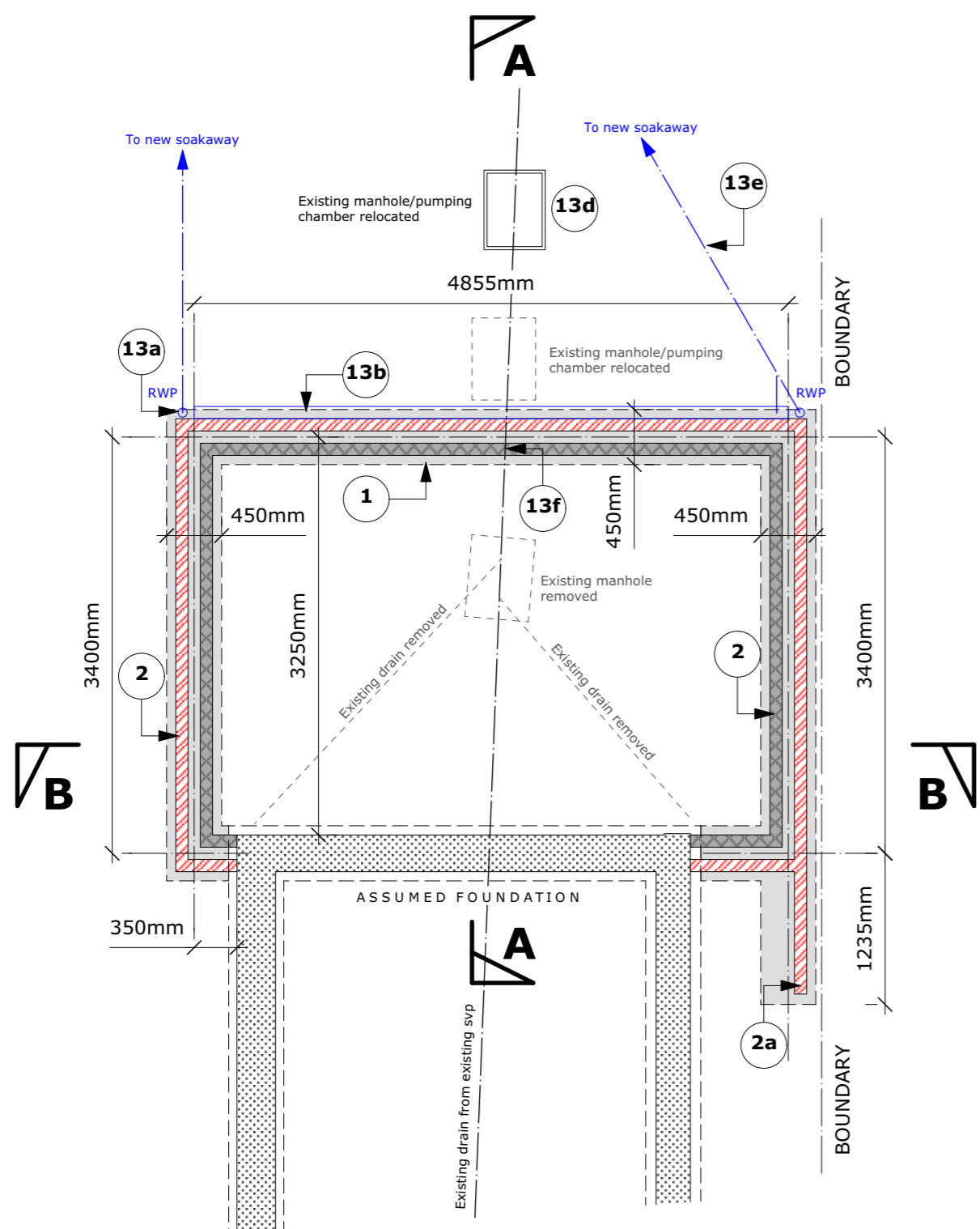


ROOF CONSTRUCTION PLAN



FOUNDATION PLAN

- 1 Concrete trench fill footings as shown on sections and foundation plan. Trench fill foundation depth to be minimum 1 metre or to depth of existing house foundations, or adjacent drains whichever is deeper. Actual depth and form to be agreed on site with Local Authority after examination of sub soil and proximity of vegetation.
- 2 External walls below dpc comprise 100mm brickwork, 100mm blockwork with 100mm cavity filled with lean mix to 225mm below DPC.
- 2a External wall to porch below dpc comprises 100mm brickwork.
- 3 DPC to be min 150mm above finished ground level, not to bridge cavity, to be continuous with dpm within floor construction.
- 4 Sub-soil to be treated with approved weed killer and covered with min. 150mm hardcore and 100mm concrete oversite laid below main floor construction with 1 layer A142 mesh reinforcement min. 40mm cover.
- 4a 1200 gauge polythene DPM laid on concrete (DPM to be lapped up wall to meet DPC), 75mm EcoTherm Eco-Versal rigid insulation, lightweight polythene sheet and 75mm sand/cement screed reinforced with D49 fabric reinforcement. 25mm insulation to be provided for full depth of screed around perimeter. U-Value = 0.22W/m2k.
- 5 External walls comprise 100mm blockwork outer skin with 15mm sulphate resisting external quality render and finish, with all necessary render stops. 100mm cavity insulated with EcoTherm Eco-Cavity Full Fill insulation, stainless steel wall ties 450mm apart vertically, 900mm apart horizontally, 100mm Celcon Standard block inner skin with 15mm plaster finish. U-Value = 0.19W/m2k.
- 5a External wall to porch comprises 100mm blockwork with 15mm sulphate resisting external quality render and finish, with all necessary render stops.
- 6 All window and door openings in external walls to have cavities closed with Thermabate cavity closer or similar approved.
- 6a Lintels over openings to be Catnic steel, fitted in accordance with manufacturers instructions and to have 150mm min bearing at each end. 'Weep' holes in bottom brick course over lintels, cavity trays inserted between skins over lintels, weep holes at 450mm centres, min. 2 per lintel.
- 6b New walling joined to existing walls using Ancon (or similar) wall starter bars with mastic seal and foam backing.
- 6c New concrete coping stone to top of wall (size to suit wall width), coping to sit on new dpc with lead flashing to surfaces below. Provide suitable cavity tray and weep holes as necessary.
- 8 Windows to be double glazed timber, windows that are within 800mm of finished floor level are to have safety glazing. All glass to BS:6262. Sealed glazed units to be 28mm thick comprising 6mm inner and outer panes with 16mm Argon filled gap and low-E emissivity coating internally. To habitable rooms windows are to provide in excess of 1/10th floor area of glazing, 1/20th floor area openable for ventilation, all windows to be fitted with trickle ventilators to heads. Windows to habitable rooms to have min. opening of 450x750mm for emergency egress and be fitted with egress ironmongery, sill to be between 800-1100mm above floor level. U-value = 1.4W/m2K
- 8a External doors to be double glazed timber, areas of glazed doors that are within 1500mm of finished floor level are to have safety glazing. All glass to BS:6262. Sealed glazed units to be 28mm thick comprising 6mm inner and outer panes with 16mm Argon filled gap and low-E emissivity coating internally. U-value = 1.4W/m2K
- 9 Flat roof ceiling joists to be 50x75mm C16 treated timber at max. 400mm centres with min. 25x50mm firrings on top. Joists hung on heavy duty galvanised joist hangers. All structural timber to be stress graded, generally to BS:4471 and 4978.
- 9a Flat roof covering to extension comprises single ply membrane on 120mm EcoTherm Eco-Torch insulation on vapour control layer on 18mm external quality plywood deck. Deck to be laid at 1:80 fall. U-value = 0.18W/m2K Membrane to be dressed up parapet and pitched roof and be lapped by lead/membrane.
- 9b Rafters, ridge and hips to pitched roof to be 50x150mm treated timber at 400mm centres. All structural timber to be stress graded, generally to BS:4471 and 4978.
- 9c Roof covering to pitched roof comprises slates on 25x38mm battens on Glidevale Protect VP400 breather membrane. Allow minimum 20mm air space to allow for drape of breathable membrane.
- 9d Roof insulation to be 125mm EcoTherm Eco-Versal partial fill rigid insulation fitted tight between rafters with min 25mm gap above, 37.5mm EcoTherm Eco-Liner insulated plasterboard fitted below rafters with skim finish, all joints to be taped. U-value = 0.18W/m2k.
- 9e Ceilings to be 12.5mm foil-backed plasterboard with skim finish. 50x25mm noggings, at min. 1200mm centres, between joists for plasterboard fixings.
- 9f New lead flashings to roof including soakers, abutment flashings, etc be Code 4 (1.8mm thick) with non-woven polyester felt underlay. All lead detailing to be in accordance with the Lead Sheet in Buildings, guide to good practice. Cavity trays to be inserted into cavity walls above flashings as necessary.
- 11 New steelwork to be designed by Structural Engineer, details to be submitted to LA for approval. All new steelwork to be encased in one layer 12.5mm fireline plasterboard with skim finish to provide min 30 minute fire resistance.
- 13 37mm diam sink wastes with 75mm deep seal traps and rodding eyes at changes of direction, connected into existing SVP.
- 13a Drainage from new roof/gutter to neatly discharge into new RW hoppers then to 75mm diam rwps and shoes. RW shoes to discharge to soakaway. Gullies and rainwater pipes should be provided with roddable access.
- 13b ACO HexDrain Brickslot channel to be installed to rear wall, all as manufacturers instructions. TO be connected to surface water drainage system.

- 13c Soakaways to be min. 5000mm from any building, volume to be total roof area (m2) x 0.05 (equivalent to 50mm rainfall) final size to be agreed on site with Building Inspector once subsoil conditions are known. It is recommended that a percolation test be carried out. All to be designed in accordance with BRE 365.
- 13d Access to drains may be provided by GRP or polypropylene inspection chambers to BS:7158, surrounded with 150mm of C20P concrete. Minimum dimensions to conform with Table 8 of BS:8301. Manholes located at changes of direction. Inspection covers in gardens to be medium-duty steel, all covers and frames to comply with the appropriate loading grade of BS:497 or BS:5911.
- 13e Drains are to be 100mm nominal diameter laid at a gradient not flatter than 1/80, unless otherwise stated and are to be constructed using uPVC pipes to BS:4660, all with flexible joints, bedded and backfilled in accordance with the manufacturers recommendations and BS:8301. Flexible pipes with less than 600mm of cover are to be surrounded with 100mm of granular material.
- 13f Where existing drains pass through the new foundations, provide suitably designed reinforced lintel to bridge drain with a minimum of 150mm between the underside of the lintel and the drain. Provide compressible material between the drain and the lintel. The foundations on either side of the drain are to be constructed to a level below the pipe bedding and the foundation must be adequately separated from the pipe surround/bedding material.
- 20 Existing external wall, window and door removed and new beam inserted over, beam to be supported on columns.
- 21 Existing rainwater pipes to be altered to discharge into new flat roof gutter.

BUILDING REGULATION CONSTRUCTION NOTES: Generally all work to comply with current Building Regulations, relevant British Standards, BBA certificates and manufacturers installation requirements as appropriate.

HEALTH AND SAFETY: The contractor is reminded of their liability to ensure due care, attention and consideration is given in regard to safe practice in compliance with the Health and Safety at Work Act 1974.

PROVIDING INFORMATION: Information about the fixed building services and their maintenance, including timing and temperature control settings, shall be provided to the owner of the building on completion in compliance with Approved Document L1A

ASBESTOS: For any property built prior to 2000 that requires intrusive works to be carried out no works shall commence without a suitable R&D Survey being carried out.

THE PARTY WALL ACT: The Client is advised that notice must be served at least one month (two months if the works involve a party wall) of works that involves building on the party boundary or within 3m of the neighbour's building where that work will go deeper than the neighbours or within 6m where the work will cut a line drawn downwards at 45° from the bottom of the neighbours foundations. Notice must be given in writing in the proper manner as laid down in the Act. The Client is advised to seek advice.

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.

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.

ALTERNATIVE PRODUCTS: Wherever materials are specified by name it is assumed that substitution for an alternative product is permitted subject to the product being equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance.

ELECTRICAL: All electrical work required to meet the requirements of Part P must be designed, installed, inspected and tested by an electrician registered under an Approved Competent Persons Scheme. Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS 7671 electrical installation certificate to be issued for the work by a person competent to do so. All switches and socket outlets to be positioned between 450mm and 1200mm from FFL.

LIGHTING: All new internal light fittings to habitable rooms to be dedicated energy efficient compact fluorescent lamps. Wet rooms are to have suitable IP rated fittings.

GENERAL NOTES

1. Dimensions are in millimetres (unless stated otherwise) and are to block or stud faces.
2. Drawings are not to be scaled, use figured dimensions only.
3. Notify the Architect of any discrepancies within the drawing and contact for clarification before proceeding.
4. All proprietary items to be fitted strictly in accordance with manufacturers instructions.
5. All works to be carried out in accordance with latest related British Standards and relevant codes of practice.



SMOKE DETECTION: Detectors are to be mains powered inter-linked smoke detectors to BS 5446 and BS:5839 Part 6 to be located within 7m from the living room and kitchen doors and within 3m from bedroom doors

VENTILATION:
Intermittent Extract:
Wetrooms to be fitted with mechanical extract ventilators capable of achieving minimum extract rates listed below,

Kitchen = 30 l/s (adjacent hob) or 60 l/s elsewhere
Utility = 30 l/s
Bathroom/shower = 15 l/s with 15 minute overrun timer

Background Ventilators:
All new windows to be fitted with trickle ventilators to give a minimum equivalent area of 5000mm2.

Ensure a min. of 500mm between background vents and extract fans.

EXISTING HEATING SYSTEM: The existing property is heated using a mains gas fired boiler, the extension will be heated using an extension to this system with a new radiator provided with a thermostic radiator valve.

WATER SUPPLY: Blending valves to be installed to all new fittings to ensure hot water does not exceed 48 degrees celsius.

DRAINAGE: Any sewer drainage which runs from the adjacent property and through the proposed site is owned by the water authority. As such it is necessary for the person carrying out the work to consult with the relevant water authority to obtain their permission to build over any drainage runs more than 6m in length or manholes that exist on the run. Please provide full details and layouts of the drainage if this applies. Anglian Water can be contacted on 01206 289470 or at developerservices@anglianwater.co.uk

SECURITY: All doors and windows are to be installed in accordance with the advice stated in PAS24:2012 or alternatively comply with the requirements set out in Approved Document Q - Appendix B. Doors to be manufactured to a design that has been shown by test to meet the requirements of British Standard publication PAS PAS24:2012 or designed and manufactured in accordance with Appendix B or Approved Document Q.

Rev	Date	Revision Description
Project Title		
Scale		1 : 50 @ A2
PROPOSED EXTENSION HOWARDS COTTAGE HIGHAM		
Project Ref.		3490
Drawing Ref.		BR-21
Drawing Title		
Date Drawn		SEPTEMBER 2021
Drawn By		IJ
PROPOSED FOUNDATION AND ROOF CONSTRUCTION PLAN		
Checked By		

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