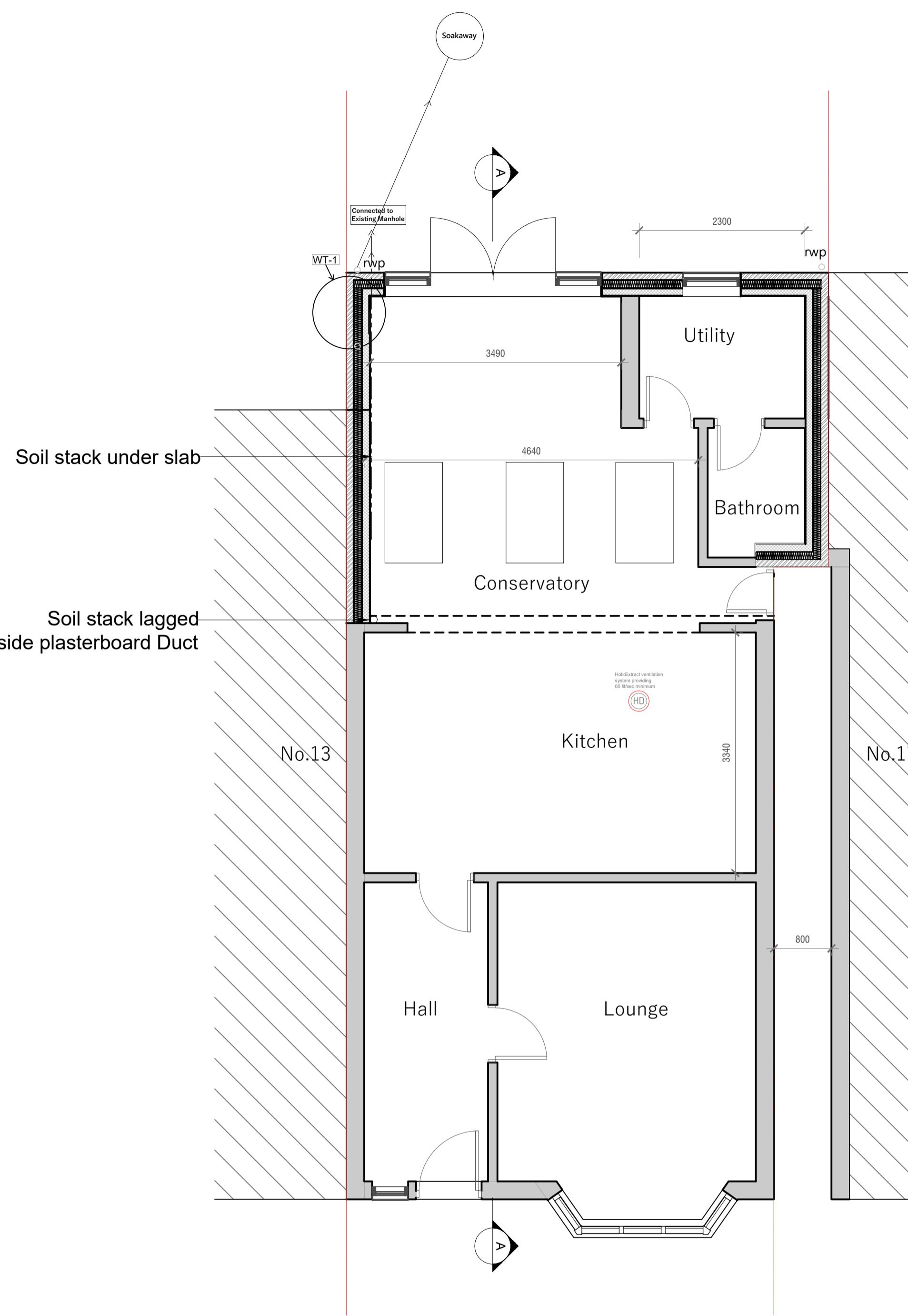
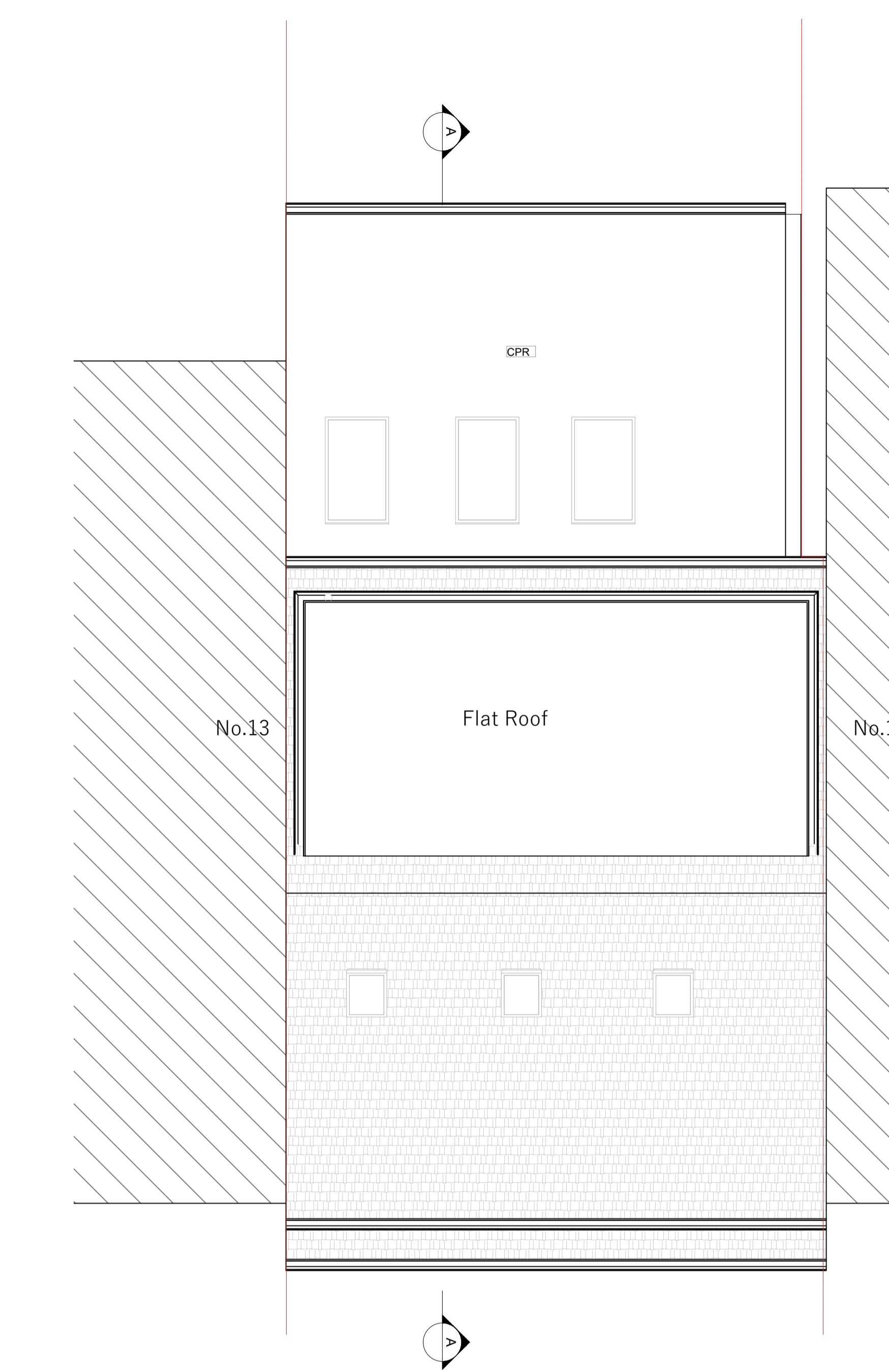


Proposed Foundation Plan
Scale 1:50



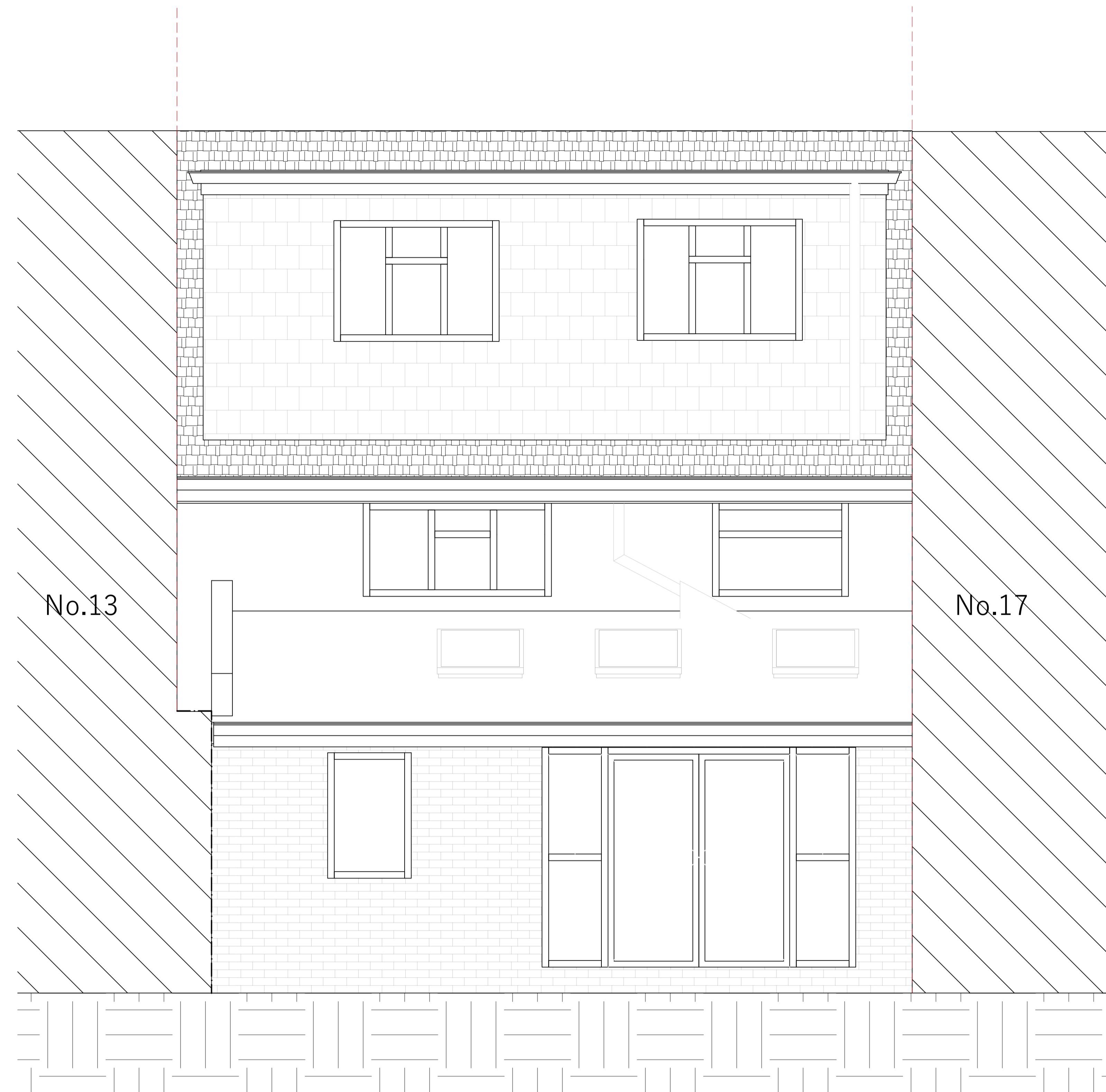
Proposed Ground Floor
Scale 1:50



Proposed Roof
Scale 1:50

Key plan:		Steel RSJ	Protected fire route	Drainage 100mm SVP	Insulation	Solid wall	Brickwork	Internal partition wall	Block work

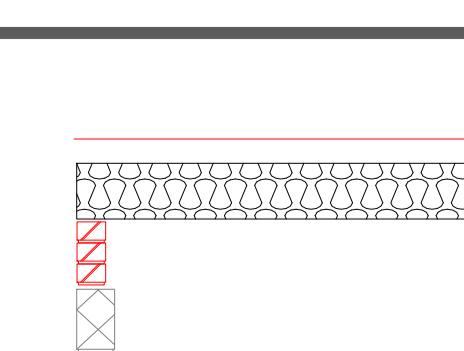
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		drawn by	SB	drawing type	Building Regulation	
		date	20/07/2023	drawing no	BR01 - 15 ST	SCALE 1:50
		checked by	MichaelJane Architecture	client ref		1:50 @ A1 page
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Proposed Rear Elevation
Scale 1:25

SCALE BAR 1:25
0m 1m 2m 5m

Key plan:	Steel RSJ	
Drainage 100mm SVP		Protected fire route
Solid wall		Insulation
Internal partition wall		Brickwork



Site address 15 St Giles Ave, Ickenham, Uxbridge UB10 8RJ, UK

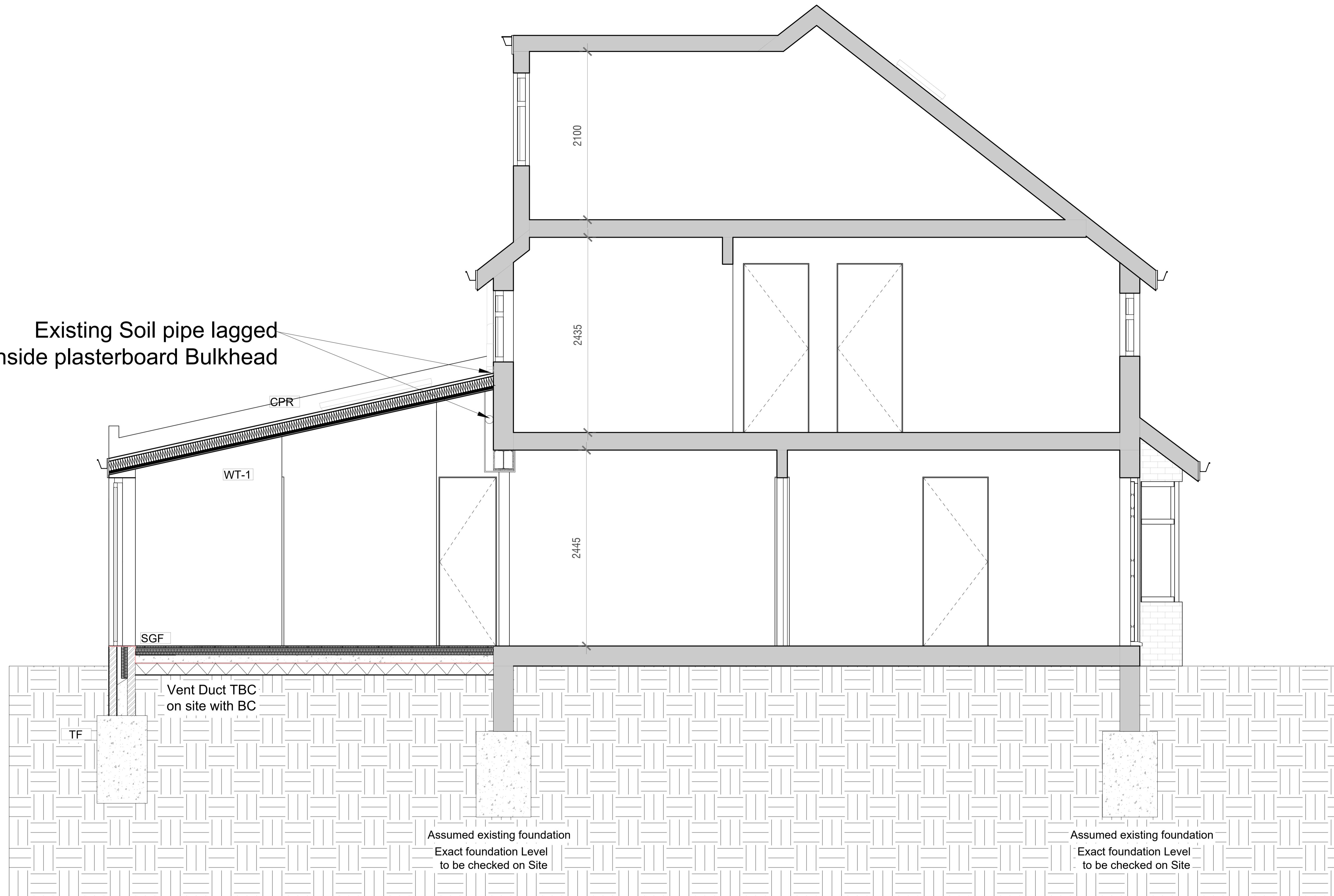
project details Rear extension, Roof Alteration and all associated works
drawn by SB
date 20/07/2023
checked by MichaelJane Architecture

revision No. 1
drawing type Building Regulation
drawing no. BR02 - 15 ST
client ref

SCALE 1:25
1:25 @ A1 page
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MichaelJane Architecture

MICHAEL JANE
ARCHITECTURE

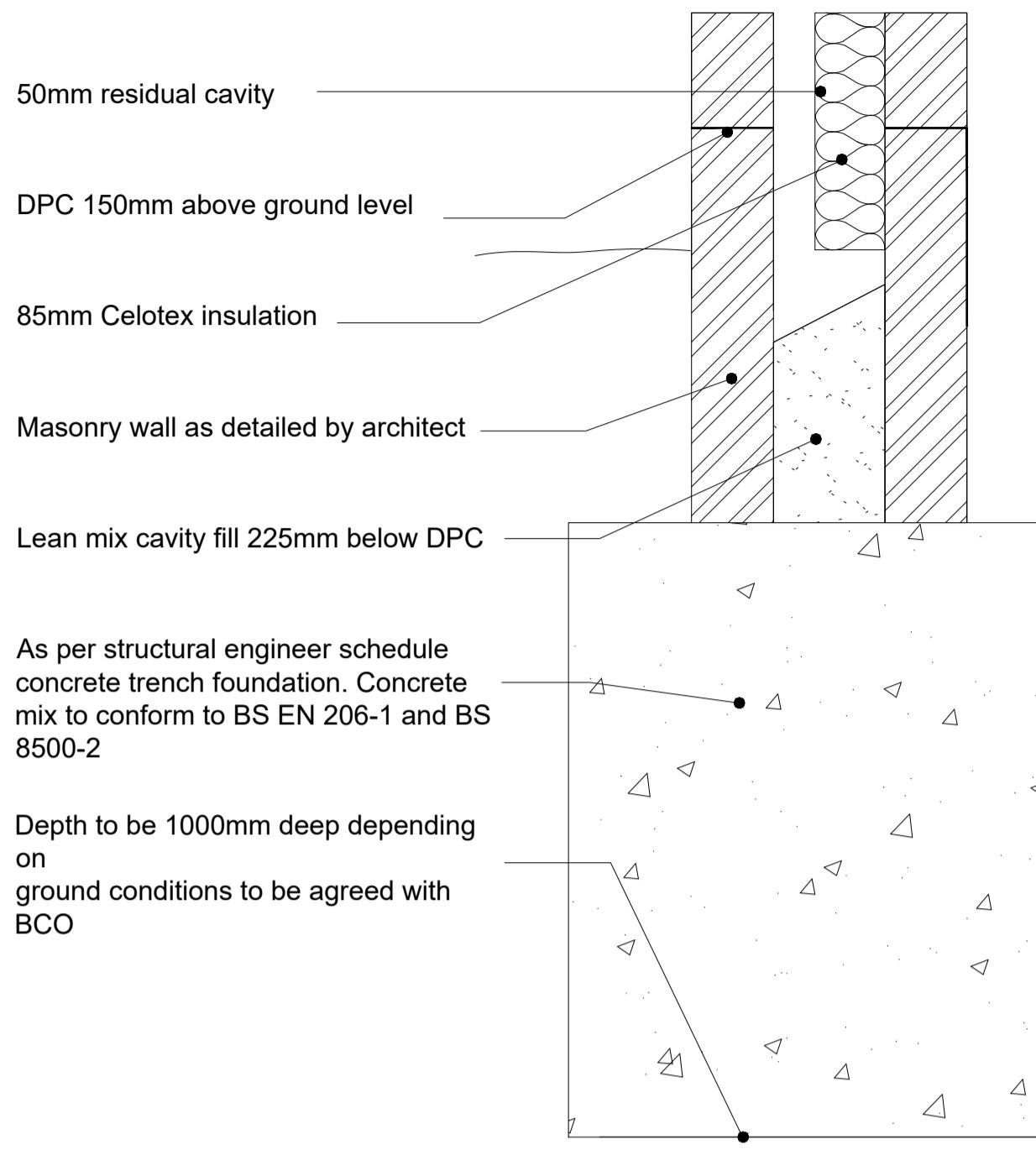


Proposed Section A A'
Scale 1:25

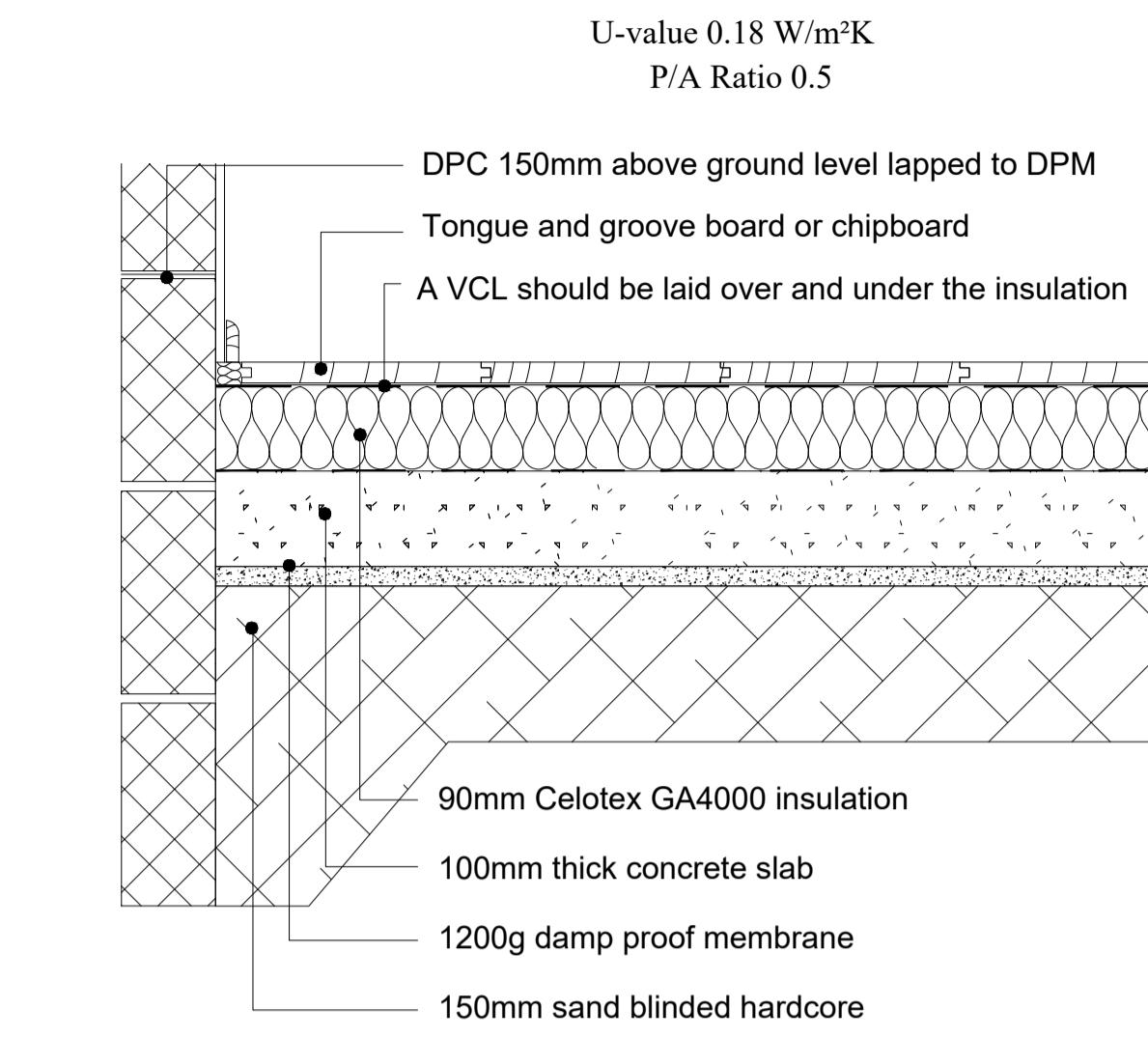
SCALE BAR 1:25
0m 1m 2m 5m

Key plan:	Steel RSJ	Protected fire route	Site address:	15 St Giles Ave, Ickenham, Uxbridge UB10 8RJ, UK	project details:	Rear extension, Roof Alteration and all associated works	revision No.:	1	MichaelJane Architecture
	Drainage 100mm SVP	Insulation			drawn by:	SB	drawing type:	Building Regulation	
	Solid wall	Brickwork			date:	20/07/2023	drawing no.:	BR03 - 15 ST	SCALE 1:25
	Internal partition wall	Block work			checked by:	MichaelJane Architecture	client ref:		1:25 @ A1 page
									This drawing is protected under copyright

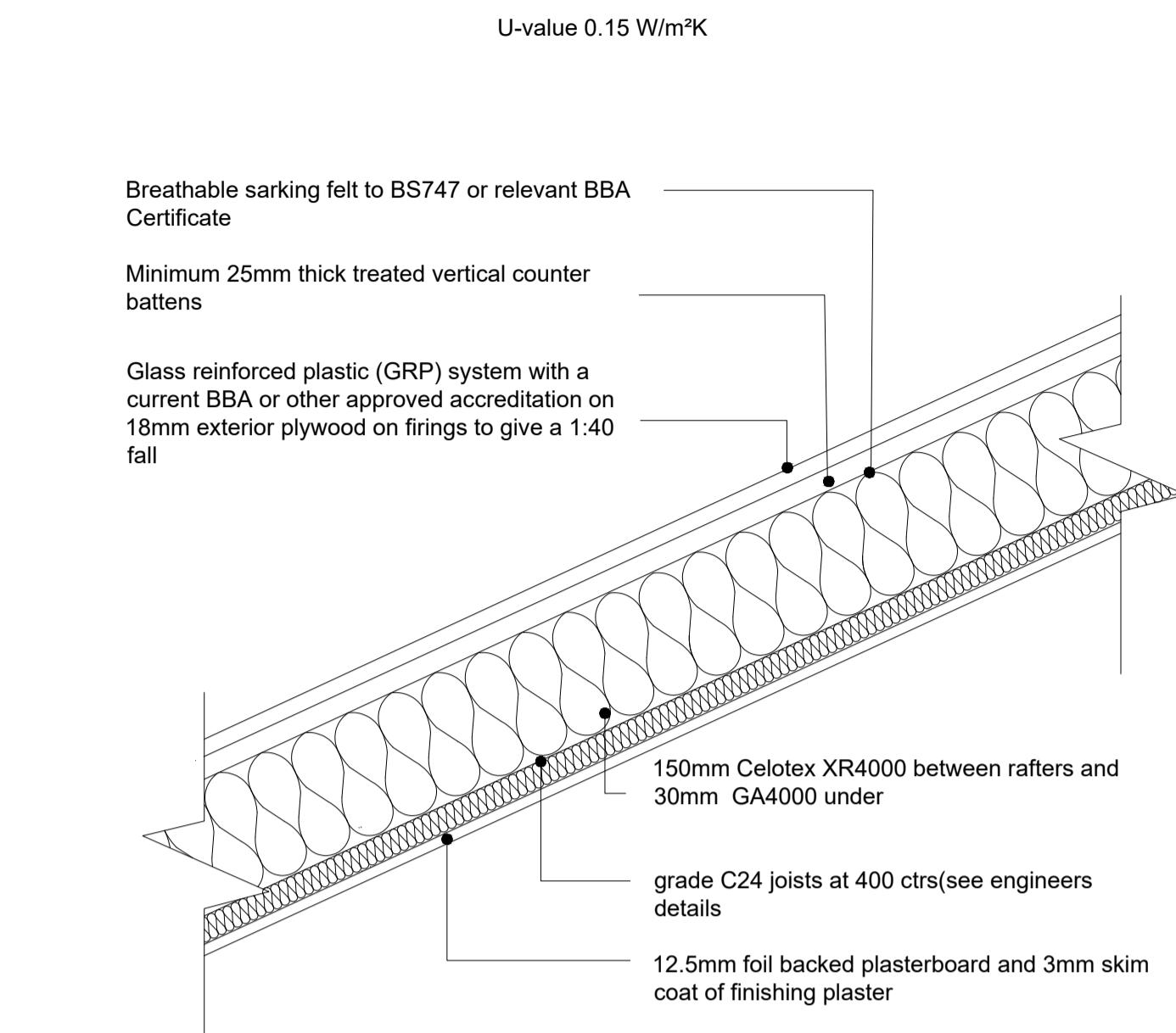
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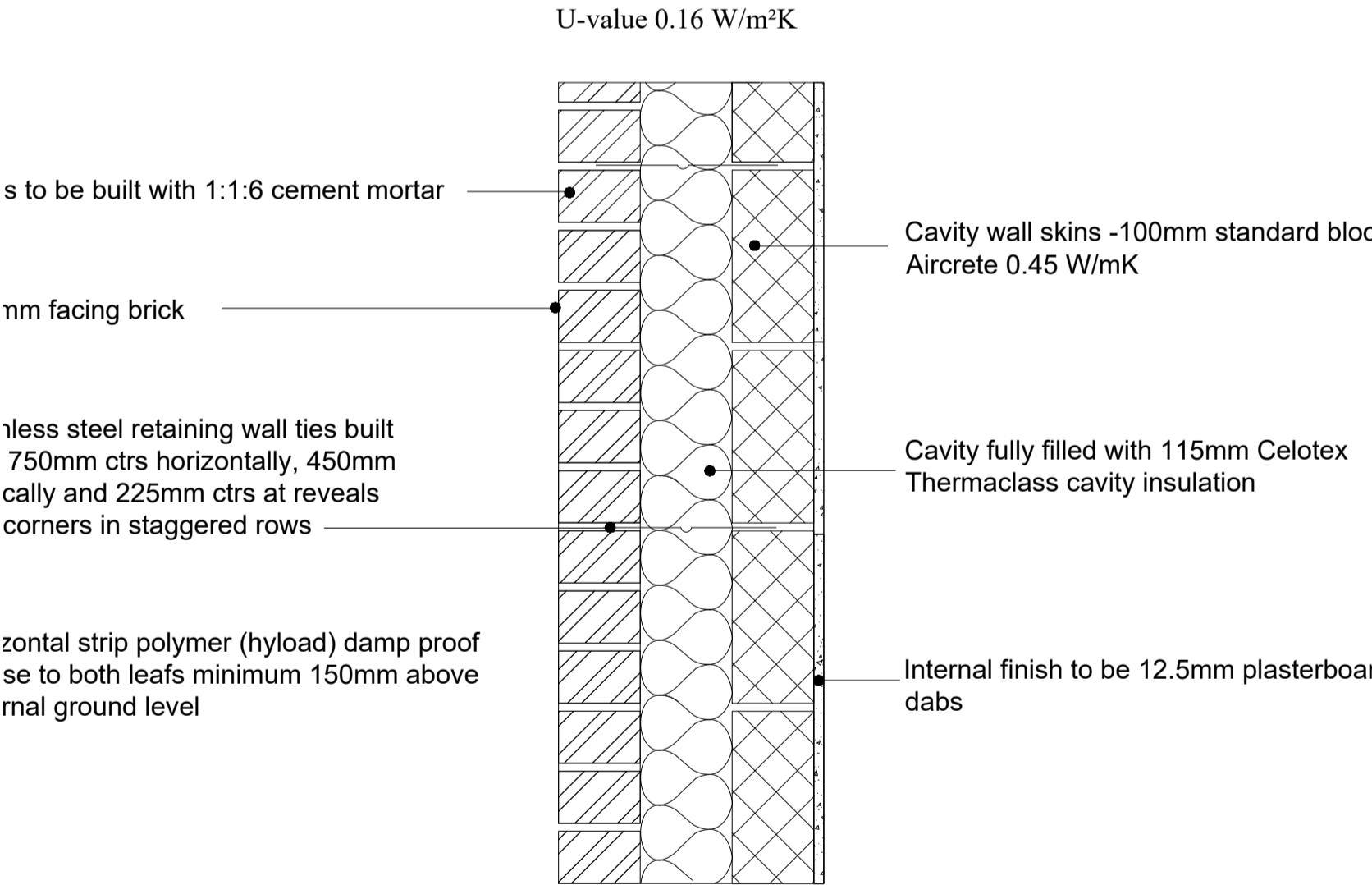
SGF SOLID GROUND FLOOR



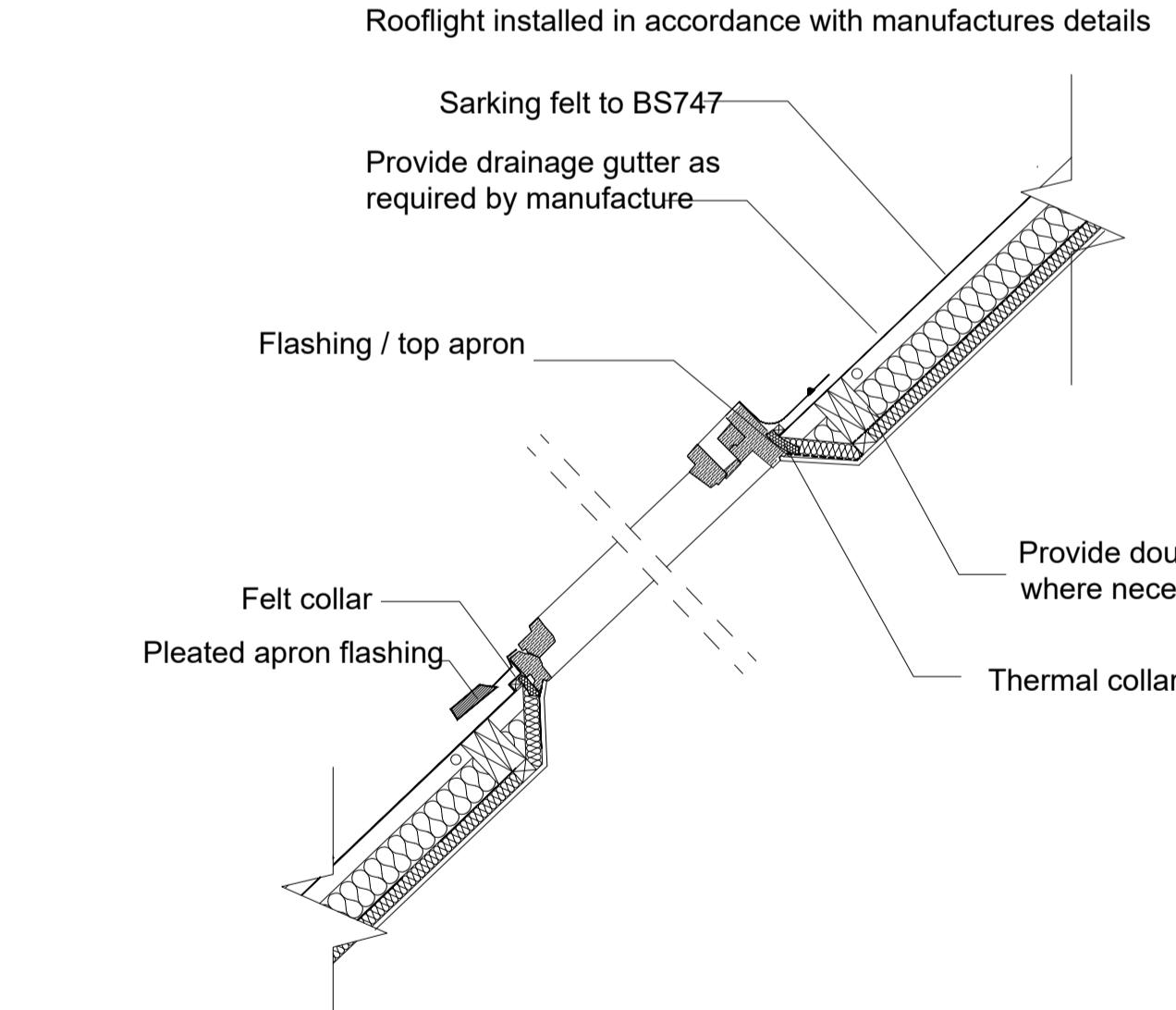
CPR COLD PITCHED ROOF



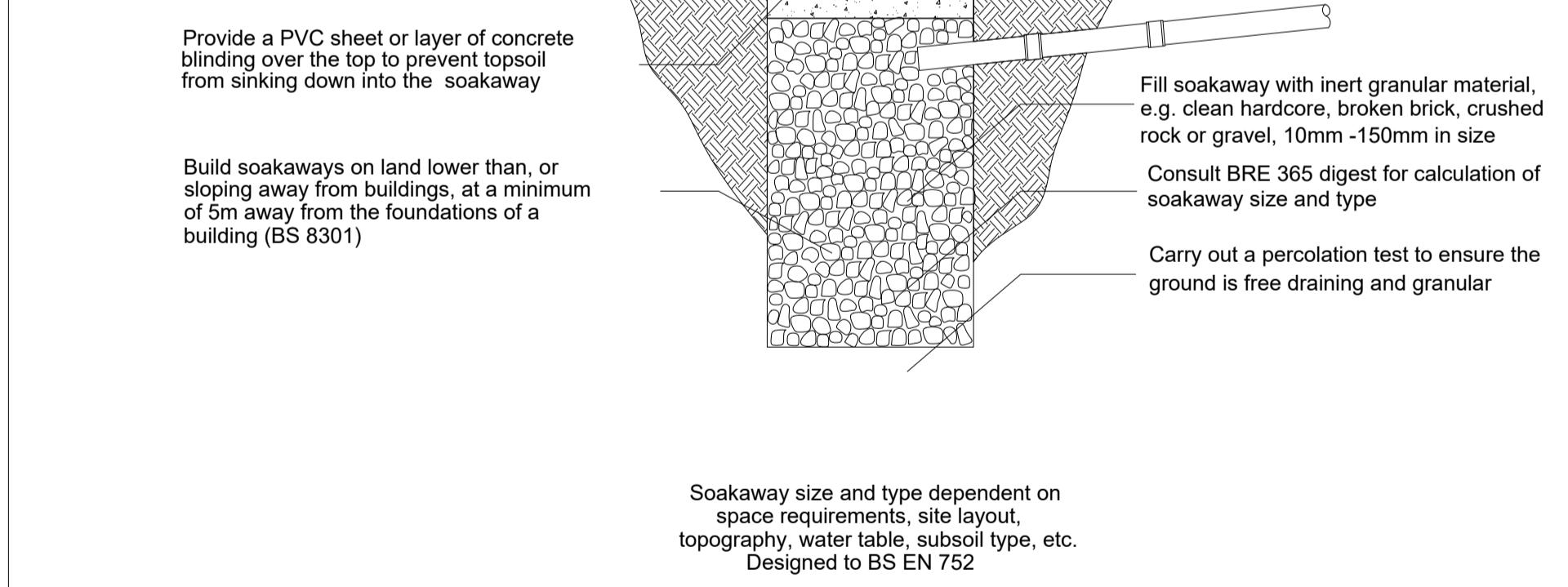
WT-1 FULL FILL CAVITY WALL



ROOFLIGHTS (SECTION)



SOAKAWAY



BUILDING REGULATIONS NOTES

GENERAL NOTES FOR EXTENSIONS:

CDM REGULATIONS 2015
The client must be aware of the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project). Domestic clients: The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will be automatically transferred to the contractor or principal contractor. The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.

Or:

(b) Exceeds 500 person days.

PARTY WALL ACT
The owner/scholar 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 near an existing Party Wall is to be carried out, including:

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

Excavations within 3 metres of an existing structure where the new foundations will be within 500mm of the adjoining foundations, or within 5 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.

TERMAL BRIDGING
Care should be taken to prevent the occurrence of thermal bridging in the insulation layers caused by pipes 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.

MATERIALS AND WORKMANSHIP
All materials are to be used in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreements, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

SITE PREPARATION

SITE PREPARATION
Ground to be prepared for new works by removing all unsuitable material, vegetable matter, stones or sharp rocks 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 of workers, contractors and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

STRUCTURE

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

RFAMS
Supply and install new structural elements such as new beams, roof structure, floor structure, walls and partitions 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 similar. Independent part to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

LINTELS
For uniformly distributed loads and standard 2 storey domestic loadings only. Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 100mm thick. 65mm thick pre-tensioned concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS EN 1992-1, with a concrete cover of 20mm and a minimum tensile strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.

For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacturer's standard tables. Stop ends, DPCs and any other detailing required above all externally located lintels. Independent lintels to have an insulated cavity closure between the inner and outer lintel. Common leaf. Lintels base plates should not be continuous and the lintel core to be insulated.

STRAPPING FOR PITCHED ROOF
Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BSEN 845-1 built into walls at max 200mm centres and to be taken across minimum 3 rafters and secured with solid noggins between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanized metal straps or other approved to BSEN 845-1 at maximum 2m centres.

STRAPPING OF FLOORS
Provide lateral strapping where joists run parallel to walls, floors are to be strapped to walls with 100mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 max 2.0m centres. Straps to be taken across minimum of 3 joists. Straps to be built into walls. depth solid noggins between joists at strap positions.

FLAT ROOF RESTRAINT
100mm x 50mm C16 grade timber wall plates to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps at maximum 2.0m centres fixed to internal wall faces.

FOUNDATIONS

TRENCH FOUNDATION
Provide a structural engineer's schedule trench fill foundations, concrete mix to conform to BS EN 206 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed with Building Control Officer to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004 Code of Practice for Foundations. Ensure foundations are constructed below ground level and adjacent to any adjacent foundations and adjacent drains. Bases of foundations supporting internal walls to be min 600mm below ground level.

SOIL TESTS
Soil tests to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

PIPES PASSING THROUGH 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 a distance of 150mm either side of the foundation concrete. The 'rocker pipes' should have flexible joints and be a maximum length of 600mm.

ANNEALING
Annealing should pass through a suitably strengthened opening in the foundation, and a pre-tensioned suitable lintel over the pipe 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 BY BCO
Advice from Building Control to be sought on suitability of pipe running through foundation before construction.

PIPES PASSING THROUGH WALLS
Walls above pipes passing through substructure walls to be supported on suitable lintel on semi-engineering bricks. Pipe to be provided with a 50mm clearance all round, opening to be masked with granular backfill.

PIPEWORK
Where new pipework passes through external walls the pipe work is to be provided with 'rocker pipes' at a distance of 150mm either side of the wall face. The 'rocker pipes' must have flexible joints and be a maximum length of 600mm.

FLOOR
SOLID FLOOR INSULATION OVER SLAB
For minimum U value required of 0.16 W/m²K P/A ratio 0.5

Solid ground floor to consist of 150mm consolidated well-rammed hardcore/lime mortar 50mm thick. 100mm thick pre-tensioned concrete slab. Fixing 100mm G72 or Gen2 ground bearing slab concrete mix to conform to BS 5500-2 over a 1200 gauge polythene DPM. DPM to be lapped in DPC in walls.

Floor to be insulated over a VCL on slab.

Where ground floor is to be insulated:

25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation board and lapped up 100mm at room perimeters having a 100mm overlap. All joints to be sealed with a 150mm and sealed. Finish over the insulation with a floating layer of 50mm tongue and groove insulation. Provide a 50mm thick moisture resistant particle/chipboard grade type C4 to BS EN 312:2000 as required. Lay with staggered joints.

Where drain pipes pass through the floor, provide A142 mesh 1.0mm wire with a 100mm dia 50mm deep cavity drain. Provide a 50mm coarse cover over length of drain.

Where existing suspended timber floor air bricks are covered by new extension, ensure new suspended timber floor is to be provided with 100mm dia UPVC pipes with 100mm concrete cover laid under the extension.

Pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with cavity tray over.

WALLS
FULL FILL CAVITY WALL

To achieve minimum U value of 0.18 W/m²K (actual U value of 0.16 W/m²K)

New cavity wall to consist of 160mm suitable facing brick, 100mm cavity depth with 115mm Celotex Thermablock Cavity Wall 21 as manufacturer's details. Inner leaf to be 100mm medium block, 0.45 W/m²K. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:16 cement mortar. Vertical joints in the board must be staggered and all joints tightly butted.

All details including corner and junction to be as relevant BBA certificate.

Location to be assessed for suitability of insulation boards. 10mm cavity to be provided if required.

MEANS OF ESCAPE

SMOKE DETECTION
Mainly operated linked smoke alarm detection system to BS EN 14604 and BS 5833-6:2010 to at least a Grade D category LD3 standard and to be mains powered with battery back up.

Smoke alarms should be sited to ensure that 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 a kitchen is not separated from the stairway or circulation space by a door, there should be an interlined heat detector in the kitchen.

ESCAPE WINDOWS
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms.

Rooms to have an unobstructed operable area that complies with:

- minimum height of 450mm and minimum width of 450mm.

- minimum area 0.33m².

- the bottom of the operable area should be not more than 1100mm above the floor.

The window should enable the person to reach a place free from danger from fire.

MEANS OF ESCAPE - SDs in all rooms and retaining existing doors (LABC guidance note Ref 07/02).

The following 3 conditions should All be met:

a) Provide smoke detectors at every storey level, at half landing levels adjacent to habitable rooms and in all habitable rooms. An additional heat detector is also required in the kitchen. Smoke detection to be mains powered linked smoke alarm detection system to BS 5846 - 1:2000 mains powered with battery back up.

b) Provide an egress window at first floor level with an unobstructed operable area that complies with:

- minimum height of 450mm and minimum width of 450mm.

- minimum area 0.33m².

- the bottom of the operable area should be not more than 1100mm above the floor.

The window should enable the person to reach a place free from danger from fire.

c) Provide a protected escape route requiring doors to be min standard of traditional timber panel type at least 32mm thick, with steel hinges, not warped and fitting well into its frame with a double seal particularly in the panel head. Internal door frames, door frames and floor frames are not acceptable as a through-stair enclosure and frames around doors must be checked and be free from defects as required by the Building Control Officer. Any glazing in doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

MOVEMENT JOINTS
Movement joints to be provided at the following maximum spacing:

Clay brickwork - 12m.

Ceramic tile - 7.5-9m.

Lightweight concrete block - density not exceeding 1,500kg/m³ - 6m.

Dense concrete block - density exceeding 1,500kg/m³ - 7.5-9m.

Any masonry in a parapet wall (length to height ratio greater than 3:1) - half the above spacings and 1.5m from corners.

Movement joint widths for clay bricks to be not less than 1.3mm/m in 12m lengths and not more than 10mm.

Additional movement joints may be required where the aspect ratio of the wall (length : height) is more than 3:1.

Considerations to be given to BS EN 1996-1-2:2005 Eurocode 6. Design of masonry structure.

ADDITIONAL NOTES FOR WALL

DPC
Provide horizontal strip polymer (hydrol) damp proof course to both internal and external walls.

150mm above external ground level. New DPC to be made continuous with existing DPCs and with floor.

DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties to be at 700mm centres.

Horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for 100mm cavity width.

CAVITY TIES
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabrade or similar insulation.

Provide vertical cavity ties and abutments.

All cavity trays must have 150mm upstands and suitable cavity weep holes (max 2) at max 900mm centres.

EXISTING TO NEW WALL
Cavities in new wall to be made continuous with existing where possible to ensure complete fire break.

If a cavity is not continuous, then new walls will be provided to have a movement joint with the existing wall. All tied into existing construction with suitable proprietary stainless steel ties.

CAVITY BARRIERS
30 minute fire resistant cavity barriers to be provided around openings, all types of walls, parts and floors.

Separate junctions with separating walls and horizontally at separating floors. Cavity trays to be provided over barrier where required. Trays and cavity barriers to be installed according to manufacturers details.

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