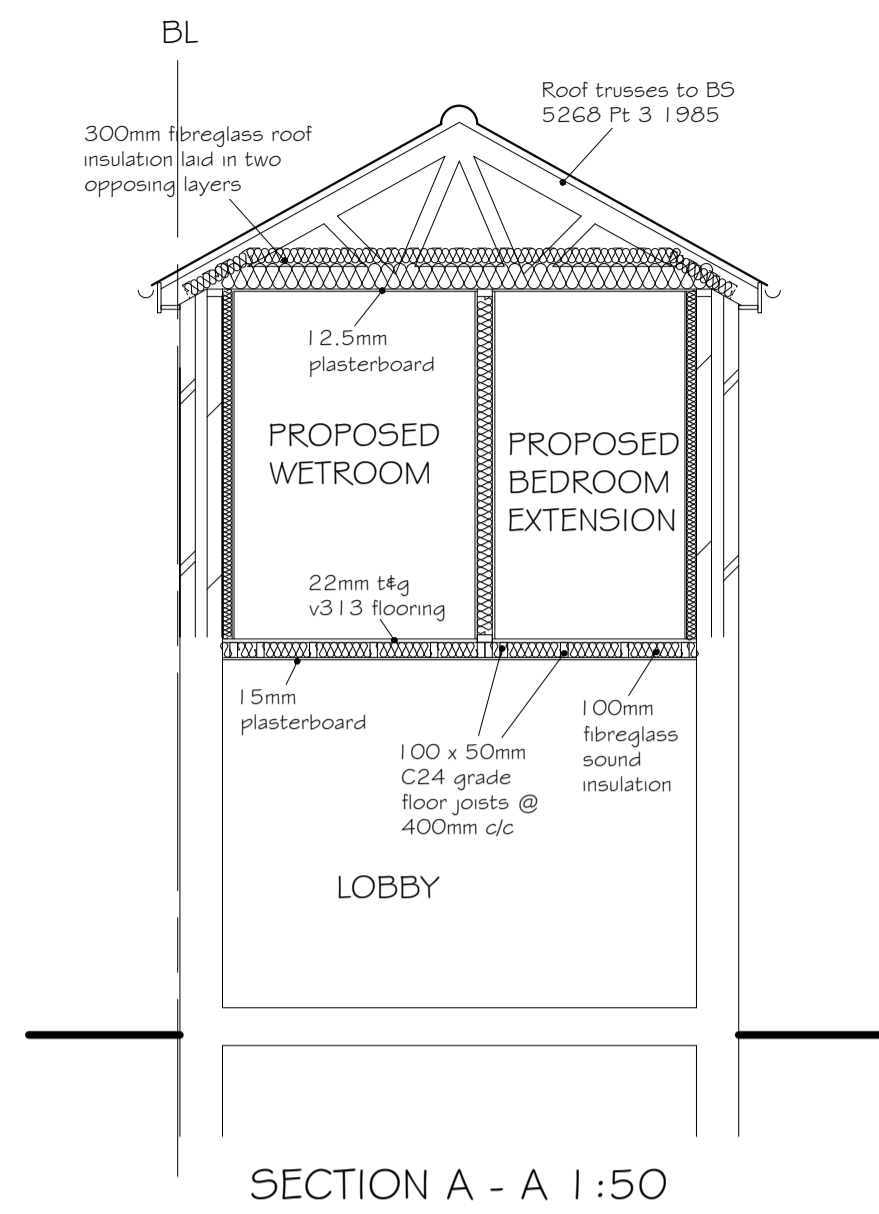
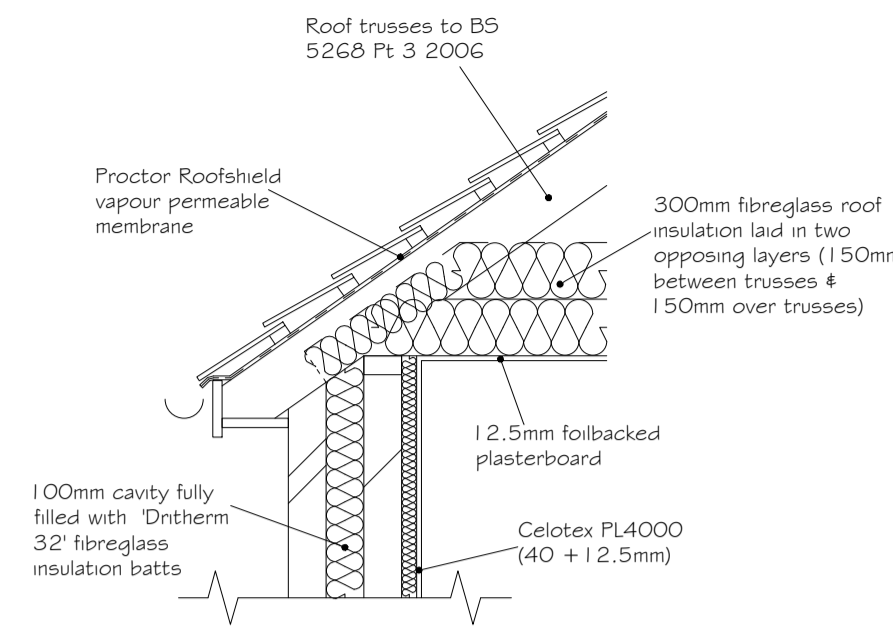


PROPOSED SIDE ELEVATION 1:100

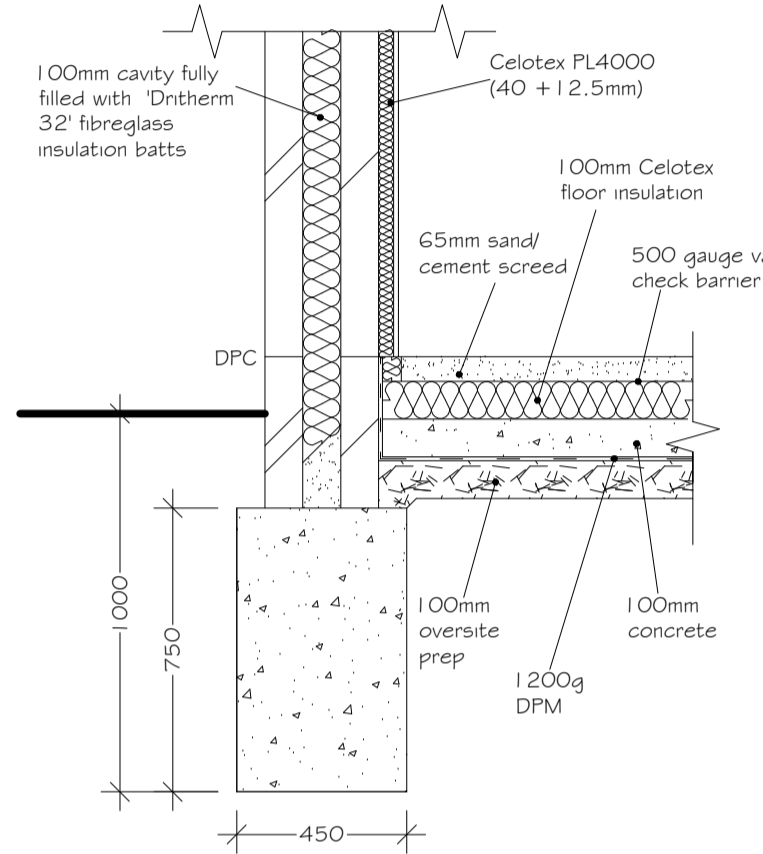
PROPOSED REAR ELEVATION 1:100



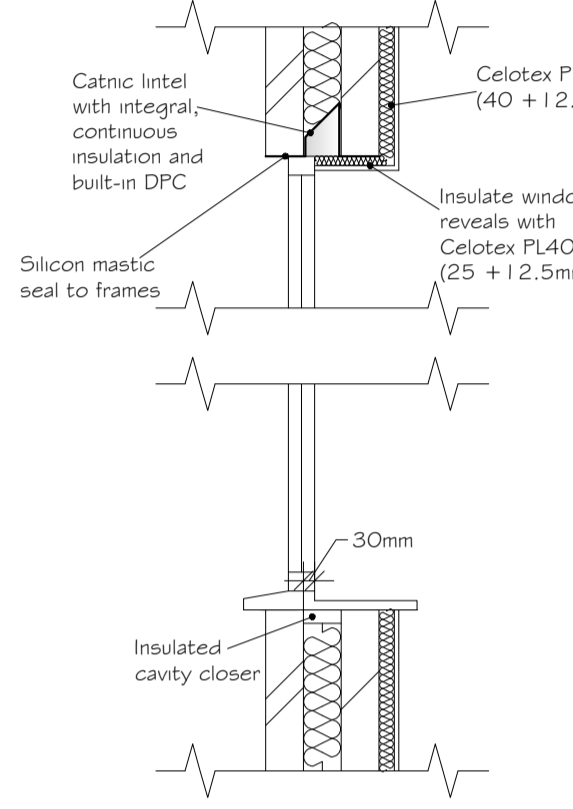
SECTION A - A 1:50



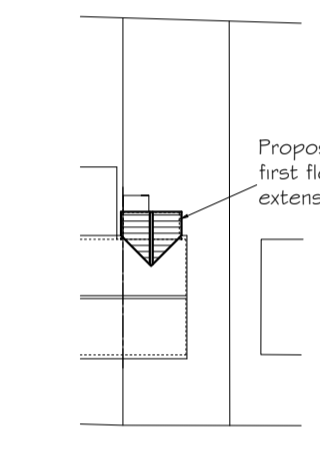
PITCHED ROOF DETAIL 1:20



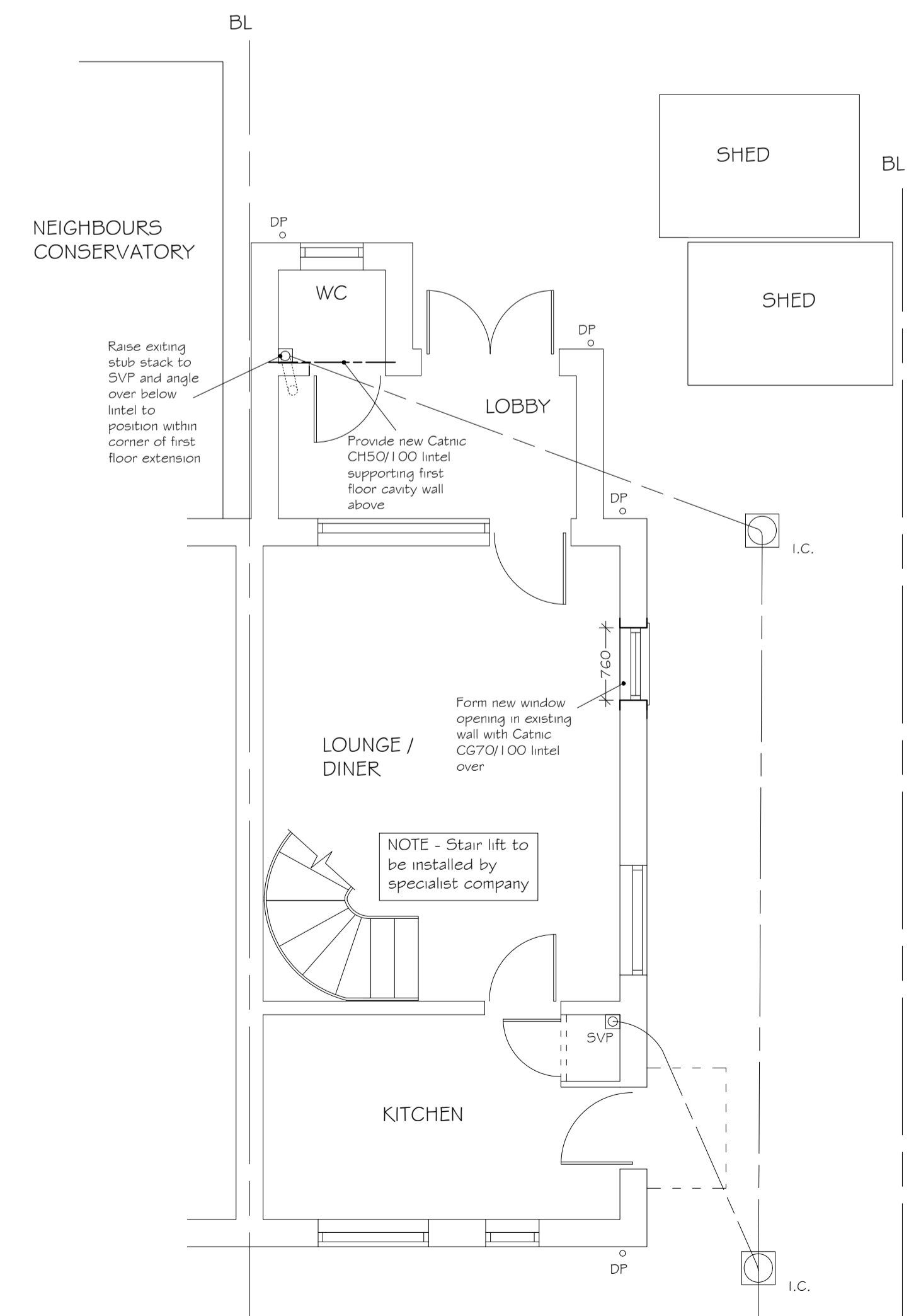
FOUNDATION, FLOOR AND WALL CONSTRUCTION DETAIL 1:20



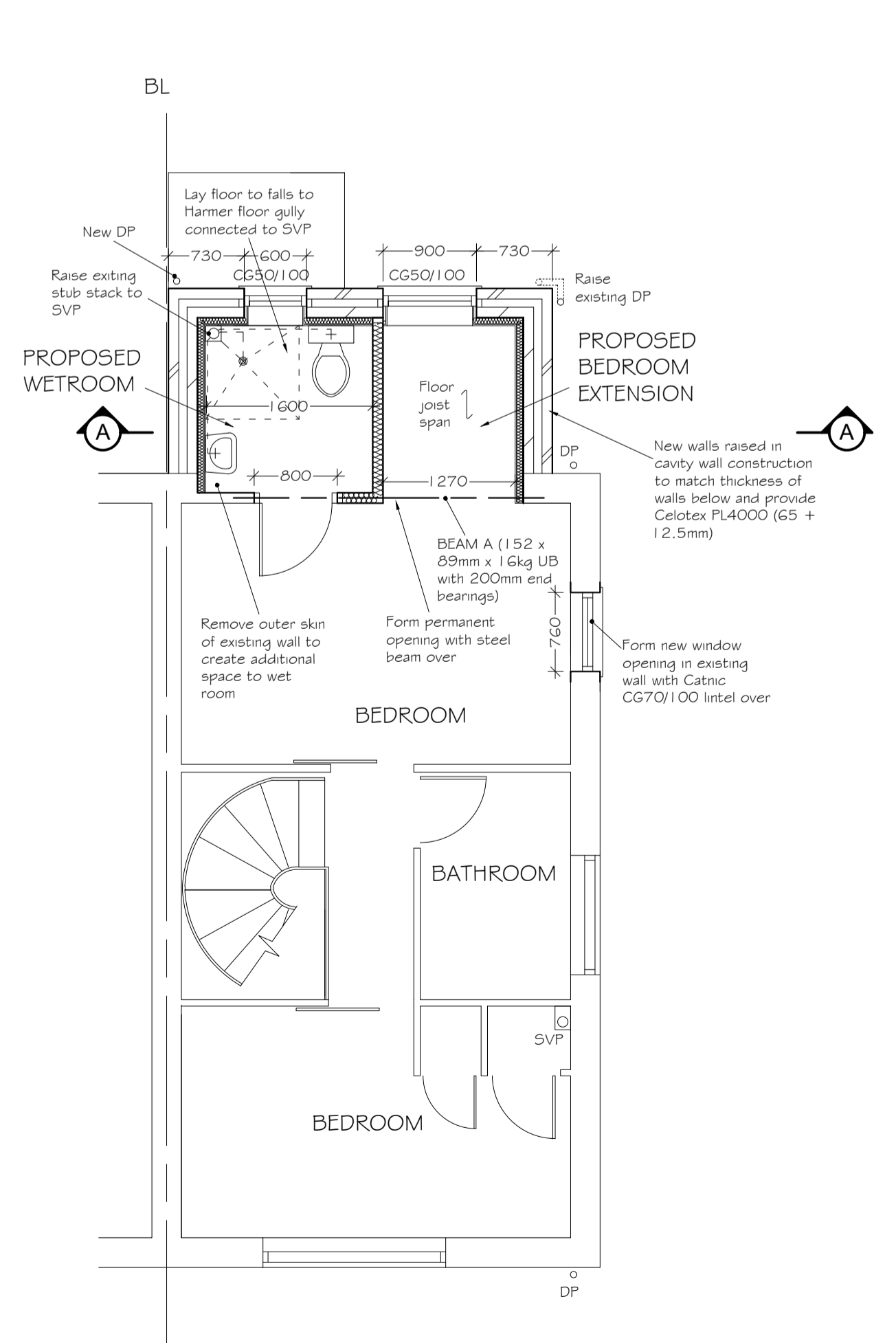
WINDOW DETAIL 1:20



SITE PLAN 1:500



PROPOSED GROUND FLOOR PLAN 1:50



PROPOSED FIRST FLOOR PLAN 1:50

Construction Notes Continued

STEEL BEAMS - Provide steel beam in position indicated on plan. Beam to bear 200mm on existing and new masonry walls. Where a flush ceiling is required provide timber plates bolted into webs of beams picking up existing roof joists via joist hangers.

FIRE PROTECTION - New steel beams where indicated to be coated with intumescent paint to give 1/2 hour fire resistance applied in strict accordance with manufacturers instructions or clad with 2 no. layers of 15mm plasterboards with staggered joints. (Fire resistance not required to steel beams where supporting roof structure only).

SMOKE DETECTION - Provide mains operated, interlinked smoke detection system in accordance with BS5639-6:2019 permanently wired to a separately fused circuit at distribution board with smoke detectors fitted with a capacitor or battery back up. Smoke detectors to be provided in hall and on each floor level on landings within 7m of doors to habitable rooms. Detectors to be situated at least 300mm from any wall and light fitting.

BOILER AND HEATING - Existing boiler to be checked for adequacy for additional heat demand and if capacity of existing boiler is increased by more than 25%, boiler to be upgraded or replaced with gas fired balanced flue condensing boiler achieving a SEDBUK rating of 92%. Repositioned/upgraded/replaced boiler positioned to suit clients choice in agreement with Local Authority Building Control. Boiler installation to be carried out by a registered gas safe engineer with reference made to OFGEM/RE Installation Assessment Procedure for condensing boilers. Flue outlet to be minimum 300mm from any opening window or door and guarded externally if within 2m of ground level. Heating system to be adapted and extended to accommodate project and repositioning of boiler if necessary. Radiators to be fitted with thermostatic radiator valves and heating system to be controlled with a programmer and room stat. Hot water cylinder if provided to have factory-applied coating of 35mm thick PU-foam having a minimum density of 30kg/m³ ensuring the heat losses from the cylinder comply with the 'Domestic Building Services Compliance Guide 2013'. Hot water supply to the bath to be regulated to ensure it does not exceed a temperature of 48°C with all other hot water supply outlets not to exceed a temperature of 60°C. Carbon Monoxide Alarm (Type A) to be fitted in room where gas boiler situated to comply with BS EN 50291-1:2018 (battery operated or hardwired). Detector to be situated on ceiling and a minimum of 300mm from any wall or located on wall as high as possible but not within 150mm of the ceiling. Detector to be positioned within 1 - 3m horizontally from appliance.

PLUMBING - All appliances to have pvc waste systems with 75mm deep seal anti-siphon traps with cleaning eyes on all waste pipes on changes in direction. Where indicated beams to have 32mm waste pipes, baths, showers and sinks to have 38mm waste pipes all discharging into new or existing 100mm dia. soil and vent pipes, trapped gullies or 100mm dia. stub stacks. New or extended SVP's where present to terminate 900mm above any opening within 3m and fitted with a vermin proof cage. Above waste pipes where exceeding permitted lengths (Up to 1.7m for 32mm dia. wastes and 3m for 38mm) to be increased to 50mm dia. where permitted lengths exceeded including common wastes where indicated on plan. Any bends within wet part of a SVP to be provided with rodding access points. Any waste pipes in excess of 40mm in diameter passing through fire separating walls or floors to be fitted with half hour fire collars where passing through roof/floor or encased in two layers 15mm plasterboard to give half hour fire resistance.

SURFACE WATER DRAINAGE - 100mm half round upvc gutters fixed to fascia board and discharging into new or extended/existing upvc downpipes (positions as indicated on plan). New down pipes where indicated to discharge into rain water shoes connected to 100mm dia. upvc drains, bedded and surrounded in 150mm pea shingle, laid to 1:40 fall discharging by priority to 1.2m cubed soakaway positioned 5m from any buildings or highway. Size of soakaway to be determined by a percolation test in accordance with BRE Digest 365. Where the ground conditions do not permit the use of a soakaway then the surface water should then be discharged into the existing drainage system ensuring all gullies are trapped and drain runs accessible for rodding purposes with the final layout discussed and agreed on site with Building Control.

ROBUST CONSTRUCTION - Robust Construction should be utilised throughout the proposed works ensuring the wall insulation is taken 150mm below damp proof course level to overlap with the floor perimeter insulation upstand and meets at eaves level with the roof insulation to maintain continuity.

Construction Notes

GENERAL SPECIFICATION - All works are to comply with the current Building Regulations, British Standards and Codes of Practice referred to herein but not specifically mentioned. The works shall be carried out to the full satisfaction of the local authority Building Control Officer. Approved inspector or other body including submission of all necessary notices and payment of fees. All products referred to on the drawing and this specification are to be used strictly in accordance with the manufacturer's recommendations and any variation to materials/manufacture specified should be checked with ADBS as this may affect potential energy ratings if required. Before starting any works, all site conditions and dimensions are to be checked and verified by the builder and any discrepancies reported to the Client. Allow to supply and fit/apply all new finishes/fittings to match existing unless otherwise specified, e.g. doors/frames, windows, door and window furniture, skirtings, architraves, dado/picture rails etc. All softwood used in a structural capacity to be FSC or PEFC certified, min C16 G grade (to BS 5268 pt 2, 1991) unless otherwise specified. If any non standard construction is encountered on site when works are being carried out to an existing building please notify ADBS to ensure proposals are suitable with construction found.

STRUCTURAL DESIGN - Construction specification to be read in conjunction with any structural calculations relating to project.

ELECTRICS - All electrics to be wired in accordance with latest IEE Regulations. Power outlets and light fittings to be located as directed by applicant. Efficient lighting to be provided in new building/extensions/alterations with at least 100% of the total of all new light fittings to have a luminous efficacy greater than 75 lumens per circuit-watt. Fixed external lighting to be controlled via sensors which automatically turn off lights when not required and when there is sufficient daylight. Each external light fitting should not have a lamp capacity exceeding 150W. All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a registered person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with. This will require an appropriate BS 7671 electrical installation certificate to be issued for the work by a registered person competent to do so.

METERS - Where existing gas and electric meters/boxes need re-locating, applicant should contact relevant service providers and all work to be carried out by nominated contractors.

HEALTH AND SAFETY - The client is to be aware that the work shown should only be executed by competent builders who are fully proficient in all forms of safety procedure relating to all aspects of building, demolition and temporary shoring and the safe operation of all plant and equipment including personal protection. The Principal Contractor is responsible for preparing a Construction Phase Health and Safety Plan before commencing work, which shall include all necessary method statements and risk assessments and details of welfare facilities relating to the work shown on the plans and detailed in the specification. The document shall be made available to the Client if required. For domestic clients, the Principal Contractor is responsible for notifying the HSE if the project is to last more than 30 working days or involve more than 20 workers working simultaneously at any point in the project or exceed 500 person days. Upon completion of the work, if there has been more than one contractor involved in the project, the Principal Contractor shall provide a Health and Safety File to the Client. This shall contain as-built information, details of underground services, any hazardous materials used, health and safety maintenance instructions, maintenance manuals, all certificates and consents and details of any residual hazards that remain.

PARTY WALL ACT - Main contractor to ensure that there will be no undermining of foundations to adjacent properties and where applicable new works of any nature that are within 3 meters of adjacent owners property and boundary walls, the main contractor is to ensure all relevant notices are served, and agreements obtained in accordance with the Party Wall Act 1996, before any works are commenced.

ENCROACHMENT - No part of the structure above or below ground is to encroach over the boundary of adjacent properties without written consent from owners.

EXISTING STRUCTURE - Expose existing foundations and lintels where necessary for inspection by local authority Building Control where additional loading occurs before commencement of works on site.

WALL CONSTRUCTION - First floor extension walls to be constructed in cavity work comprising of an outer skin of 102mm facing bricks. Cavity width to match wall below and fully filled with D'ntherm 32' fibreglass insulation batts taken 150mm below level of floor insulation with adequate support provided by wall ties. The inner skin to comprise 100mm Thermalite turbo blockwork or similar block finished internally with Celotex PL4000 insulation board (65 + 12.5mm) with taped joints and a plaster skim coat finish. The wall construction is to attain a maximum U' Value of 0.18 W/m²K. The skins of the cavity wall are to be tied together using stainless steel wall ties, spaced at 450mm centres vertically and 900mm centres horizontally staggered and doubled up at reveals. The cavities are to be closed at all window and door openings with insulated cavity closers overlapping frames by 30mm. Masonry returns and piers less than 350mm to be reinforced with 'thickor' reinforcement provided in each block course and every third block course. First floor partition walls constructed in timber stud built off double floor joist where indicated. Studwork partition walls constructed of replastered 100 x 50mm C16 G grade timbers at 400mm centres with 100 x 50mm head plate, sole plate and nogging to suit plasterboard joints. Provide fibreglass insulation to infill voids and finish both sides with 15mm plasterboard with taped joints and a plaster skim coat.

FIRST FLOOR CONSTRUCTION - Provide 100 x 50mm C24 grade joists at 400mm centers where indicated. New joists supported off joist hangers in masonry walls. Provide 22mm t4g v313 flooring grade chipboard on joists. Ceiling to comprise of min. 15mm plasterboard with filled and taped joints to receive a finish to suit clients choice. Floor voids filled with 100mm fibreglass sound insulation. Provide double joists under 1st floor stud partition walls. Strutting of joists to be provided at mid span where joists span between 2.5 - 4.5m and 2 rows of strutting at one third span positions where span more than 4.5m.

LATERAL RESTRAINT - Restraint straps to be provided at 2m c/c at roof level and floors above ground level where present. Straps to span minimum 3 no. joists with noggins between joists on line of straps.

MOVEMENT / EXPANSION JOINTS - New masonry walls constructed with movement joints all in accordance with manufacturers guidance and instructions. In general, provide movement joints to facing brickwork at maximum 1.2m centers and no less than 6m from any corner, aggregate blockwork at maximum 9m centers and lightweight autoclaved blockwork at maximum 6m centers. New work to be tied to existing using Turfix or similar approved superstructure wall brackets. (Fixed in accordance with manufacturers instructions.) Provide stainless steel brackets to external leaf, galvanised brackets to internal leaf. Provide horizontal ties into new mortar beds at 450mm centres vertically. Provide 10mm Compribands between horizontal ties and seal externally with a 2 part polysulphide sealant.

LINTELS - All lintels are to be galvanised steel lintels in masonry walls, 'catnic' or similar approved, with propriety cavity tray where required and attaining 150mm end bearings. Lintels in external walls to be clad with 15mm lightweight plaster coat to inside face of lintel. Lintel types as indicated on plan.

WINDOWS/DOORS - Provide upvc/powder coated aluminium windows and doors where indicated with trickle vents to give 2000mm² (10000mm² equivalent area) to each habitable room (including kitchen) and 4000mm² (40000mm² equivalent area) to bathrooms, en-suites, shower rooms, utilities and cloakrooms. The windows and doors are to provide a minimum of 5% of floor area in openable window area to each room. The windows and doors are to be double-glazed with sealed units with a 1.6mm argon gas filled air gap and low-E glass (Emmissivity value = 0.05) to achieve a max. U' value of 1.4W/m²K for doors and windows fitted with draught seals and frames sealed at junction with walls with a flexible sealant. Provide emergency egress window to modified first floor bedroom. Emergency egress windows to have an opening casement fitted to allow an unobstructed area minimum 750mm x 450mm. Bottom of openable area of egress window to be not more than 1100mm above finished floor level. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

SAFETY GLASS - All glazing in windows within a distance of 800mm above finished floor/ground floor level and glazing in doors and adjacent sidelights within a distance of 1500mm to be safety glass to comply with BS 6206 1981.

PITCHED ROOF CONSTRUCTION - Roof construction to comprise of licensed manufacturers prefabricated roof trusses at max. 600c/c all designed, installed and braced in accordance with BS 5268, Pt 3, 2006. Final design layout and truss calculations to be submitted to Building Control for approval prior construction of roof. Trusses fixed to 100mm x 50mm C16 G grade timber plates strapped to masonry walls at 1.5m centres. Roof finish to comprise of roof tiles and ridge tiles (type to match existing) laid to 50 : 25mm eave treated tie battens fixed on one layer of Proctor Roofshield vapour permeable membrane. Roof to be insulated with 300mm fibreglass quilt laid in two layers 90 degrees to each other (150mm between joists and 150mm over joists). The roof construction to achieve maximum U' Value of 0.15W/m²K. Provide fascia board and soffit to match existing. Ceilings to comprise 1 layer of 12.5mm foiled plasterboard with taped and filled joints to receive finish to suit clients' choice. Code 5 lead valleys.

VENTILATION - Mechanical ventilation to be provided to bathrooms, shower rooms, utilities, kitchens and WC accommodation where present. Mechanical vents to be generally manually operated fans to 1.5litres/second discharge rate to bathrooms, shower rooms and WC accommodation. 30litres/second to utilities and 60 litres/second to kitchens all ducted directly to outside. Windowless WC and other wet area accommodation fans to be linked to light switch and have a 15 minute overrun. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

ARCHITECTURAL BUILDING DESIGN SERVICES

Unit 2 Beamish Hub
Berwick Road
Ipswich
Suffolk
IP3 9RY

DAVID HART ACABE

Tel: 01473 276147
Mob: 07919055797
E-mail: info@abds.org.uk
Website: www.abds.org.uk

Client Name and Site Address
Mr and Mrs C Smith
10 Morris Way
Needham Market
Suffolk
IP6 8TD

Scale Bars
1:500
0 5m 10m 15m 20m
1:100
0 1m 2m 3m 4m
1:50
0 1m 2m

Project
Proposed first floor rear extension

Drawing Number	Scales	Paper Size	Revisions	Drawn
23/12/0031	1:20, 1:50, 1:100, 1:500	A1	B	S.B