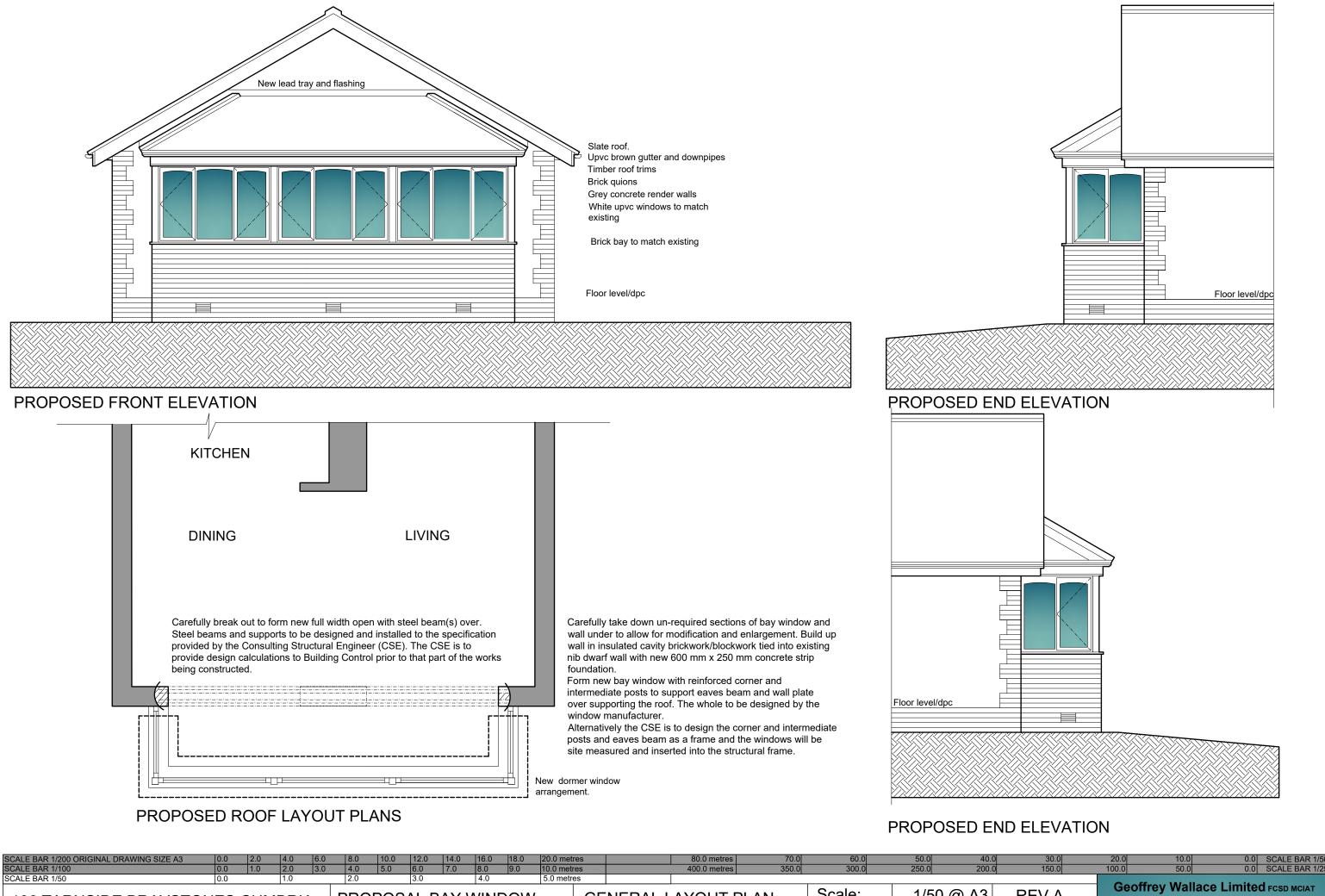


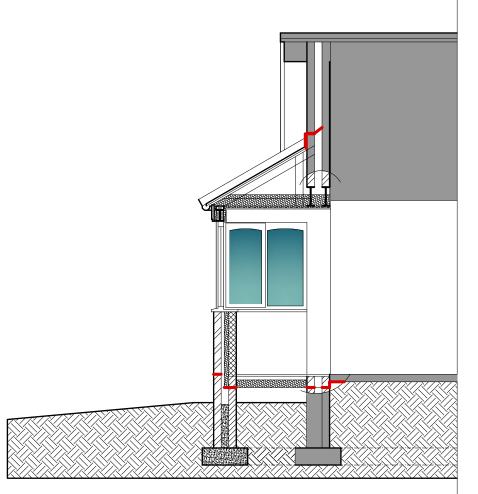
EXISTING GROUND FLOOR PLAN

EXISTING END ELEVATION EXISTING END ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE AS 0.0 2.0 4.0 0.0	0.0 10.0 12.0 14.0 10.0 18.0	20.0 fileties 70.0	00.0 30.0 40.0 30.0	20.0 10.0 0.0 SCALE BAR 1/300
SCALE BAR 1/100 0.0 1.0 2.0 3.0	4.0 5.0 6.0 7.0 8.0 9.0	10.0 metres 400.0 metres 350.0	300.0 250.0 200.0 150.0	100.0 50.0 0.0 SCALE BAR 1/2500
SCALE BAR 1/50 0.0 1.0	2.0 3.0 4.0	5.0 metres		0 (6)4/
106 TARNSIDE BRAYSTONES CUMBRIA CA21 2YW FOR MRS MIRIAM BENZIE	PROPOSAL BAY WINDOW EXTENSION	ELEVATIONS Da	cale: 1/50 @ A3 REV ate: DEC 2021 DATE WG No. 21/0323/02	Geoffrey Wallace Limited FCSD MCIAT Architectural Design and Technology Mobile 07816046756 geoffreywallaceltd@gmail.com



1/50 @ A3 **GENERAL LAYOUT PLAN** Scale: REV A PROPOSAL BAY WINDOW 106 TARNSIDE BRAYSTONES CUMBRIA **Architectural Design and Technology** DEC 2021 Date: 10/03/2022 MODIFICATION/EXTENSION Mobile 07816046756 CA21 2YW FOR MRS MIRIAM BENZIE DWG No. 21/0323/03 geoffreywallaceltd@gmail.com



PROPOSED SECTIONAL ELEVATION

FOUNDATIONS

Foundations

Excavations for foundations

FOUNDATIONS MAY BE RECONSIDERED WITH BUILDING CONTROL DEPENDANT ON SITE SPECIFIC GROUND CONDITIONS.

Foundation trenches to be excavated to suit dimensions indicated and taken down to virgin ground for inspection by Local Authority Building Control officer

Depth may vary according to site conditions and site contours but top of concrete must be min 450 mm, below the finished ground level Strip foundations to be generally 600 mm. wide x 225 mm. min. deep to external cavity walls and 450 mm. x 225 mm. min. for 100 mm. load bearing internal walls or with min. 150 mm. toe where wall

Form all steps in level of foundations in vertical increments of 225 mm. to suit block coursing, and with min 300 mm horizontal overlaps.

Concrete to be premixed C25 as described in tables 1 and 2 of B.S. 5328 maximum size aggregate to be 20 mm. All concrete shall be distributed and placed in position as quickly as practicable by a method which precludes contamination, segregation or loss of materials, compaction shall be complete before the initial set commences Partial set concrete shall not be reworked or used. All concreting shall be continuous to completion or to an approved construction joint.

During the first seven days the concrete shall be protected by whatever means to prevent over rapid drying. Steps in the foundations are to overlap by twice the height of the step or by 300 mm. whichever is the greater and should not be of greater height than the thickness of the foundation. In general steps should be in increments of 225 mm. to suit block covering.

Tie new foundation horizontally to existing foundations, by inserting 3 no. 9 mm. twisted mild steel bars in a dovetail pattern into the face of the existing strip foundations and install new concrete foundations to fully surround steel connections, to form a horizontal tie between the two foundations, to prevent uneven settlement.

Cavity walls below ground.

300 mm. thick cavity walls consisting 100 mm. thick facing brick outer leaf with 100 mm wide cavity back filled with concrete to ground level max 225 mm below damp proof course and 100 mm solid concrete block inner leaf. Cavity wall ties to be Furfix stainless steel or similar specifically designed for 100 mm. cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern. Fix additional wall ties every course at all corners and jambs. Between ground level and floor level, fix bituthene Hyload DPCs continuous across the cavity to both inner and outer leaves of walls and integrated with the Gas and Damp proof floor membrane at min of 150 mm. above ground level. Fit cavity trays over continuous gas protection in cavities. Lay facing bricks from one course below finished ground level dpc level in outer leaf to form plinth.

Drainage

Reconnect new roof rain water downpipe to existing drainage outlet.

New wall connections:

Tie all new walls to existing with stainless steel wall connectors bolted to parent wall and tied into new wall with integral stainless steel ties built into coursing of blockwork.

Foundations:

Tie new foundations to existing with 12.5 mm. dia. twisted stainles steel dowells min 300 mm. long drilled and grouted into existing footing to form a dovetail and cast into new foundations to prevent uneven settlement

New Ground Floor Construction. U Value 0.16 W/M2K

Level of sub-base with inert hardcore and treat with weed killer prior to fixing suspended timber floor.

Allow for flooring finish thickness on 25 mm thick tongued and grooved Weyroc particle board decking glued and screwed to 150 mm x 50 mm SC16 timber joists at 400 mm centres.

Fix 150 mm thick rigid insulation slabs cut to fit neatly between joists with no airgaps. Fix ventilation blocks to cavity walls at maximum 2000mm centres to ventilate the under floor void.

Cavity wall above dpc

U Value 0.22 W/M2K

300 mm. thick cavity walls consisting 100 mm thick facing brick outer leaf 100 mm, clear cavity with 60 mm. Kingspan insulation or similar and 100 mm. thick Armstrong Airtec 3.6n/mm² concrete block inner leaf. All walls are to be built in a manner to ensure the building would pass a pressure test to achieve 5.5 M³ / (h.M²) at 50PA or better. Walls are to be dry lined internally with minimum 15 mm. high density plasterboard on dabs or patent plasterboard adhesive. Fix insulated cavity closers at all jambs and cills to doors and windows and fix tray under cills and lintels to heads of openings. Cavity wall ties to be Furfix or similar stainless steel specifically designed for 100 mm. cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern or as otherwise recommended by the wall insulation manufacturer. Fix additional wall ties every course at all corners and jambs. Tie new cavity walls to existing with crocodile stainless steel wall connectors or similar, bolted to parent wall and with integral fish tail wall ties built into coursing of new block/brick wall leaves. Cut out minimum 25 mm. wide chase to form space for insulated damp proof course or cavity closer to isolate inner leaf walls from external

Modifications to existing wall.

Form new opening with steel beam over. The beam size is to be designed by the Consultant Structural Engineer.

New Extension roof construction.

U Value 0.11 W/M²K

Roof fabric.

Approved slates to match existing on 25 mm. x 50 mm treated timber battens on Proctor Roofshield breathable roof membrane or similar.

Roof structure.

Minimum 100 mm x 50 mm C16 grade selected timber rafters at 400 mm centres fixed to 100 mm x 50 mm timber wallplates sat eaves beam and held in place with BAT MS305 straps at 1200 mm centres. Form hip with 100 mm x 75 mm C16 hip blade

Insulation of roofs

Insulate at ceiling level 150 mm thick Celotex or similar insulation slabs, cut to fit neatly between joists, with no airgaps and tape joints as recommended by manufacturer. Fix 40 mm/25 mm insulated Gyproc Thermoliner insulated 15 mm plasterboard and skim ceilings throughout extension.

Leadworks to roofs.

All lead gutters, valleys, trays, soakers and flashings are to be in the correct code thickness as recommended by the Lead Sheet Manufacturer's Association and produced and fixed strictly concordance with their published recommended details. All roof trims, eaves boxes and barge boards etc to match existing. Gutter and downspouts to be grey upvc to match existing.

The whole of the window frame construction including corner and intermediate posts should be designed by the window manufacturers to support the roof and eaves beam. Alternatively the CSE is to design the corner and intermediate posts and eaves beam as a frame and the windows will be site measured and inserted into the structural frame.

Windows are to be designed and constructed by a member of a self-certification federation such as FENSA.

- Windows and doors are to be designed to comply with
- Part B Means of Escape,
- Part F Ventilation
- Part K Protection from falling Collision and impact
- Part L Thermal Efficiency and Performance
- Part M Wheelchair Access
- Part N Toughened safety glass
- Part Q Secured by Design

All new windows are to be either adonised metal or uPVC framed double glazed units or similar. All opening casements or sashes to habitable rooms are to be min. 450 mm. high and 450 wide to allow for escape in the case of fire, with min area of .33 M, sq. and a cill height not less than 800 mm. and no greater than 1100 mm. Fit safety glass to BS 6206 to all new windows within 800 mm. of floor level and doors and side panels to comply with Building Regulations.

All windows are to be suitable energy saving glazing to achieve the stated U value requirement. For instance, 16 mm. 4-8-4 double glazed with Pilkington "K" glass double glazing units and gas filled to give a minimum overall U value for the window and frame of 1.4

Fit all new windows with draught proof seals to all opening casements and seal around heads jambs and cills with airtight mastic sealant

All sashes are to be draught sealed and all frames fully sealed to structure with mastic joints to prevent heat loss directly to the external air. Windows are to be located in the wall to align with the cavity closer to ensure the thermal barrier is maintained. Fit windows with trickle ventilation at a ratio of 500 Sq. mm per 1 sq.

Where opening windows are at ground level, they are to be fitted with protective safety barriers designed to withstand a Horizontal load of 0.74 kilo Newtons (kN) for every metre length.

All openings to be remeasured on site prior to manufacture.

metre of floor space throughout habitable rooms.

Electrical Installations.

All electrical installations are to be designed and carried out by a suitably qualified Electrician or Electrical Engineer, the system is to be designed and tested as defined by BS 7671: 2001 Chapter 13 or an equivalent standard. These works are to be undertaken by a person registered with an electrical self-certification scheme or alternatively by a suitably qualified person with a certificate of compliance produced by that person to Building Control upon completion of the works.

Full details are to be submitted to Building Control prior to installation or the Electrician must be registered with a self-registration scheme authorized by the Secretary of State. Where self-certification is accepted the works commissioners should receive a signed Building Regulation self-certification certificate after installation and testing. All materials used in the installation are to bear the "CE" mark for the relevant EEC directive regarding the use of Electric supplies, Low voltage and extra low voltage supplies.

All electric design work is to take into account the requirements of all other Parts of the Building Regulations which may be affected by the electrical installations i.e. Part M Accessibility.

Energy efficient lighting.

All rooms are to be provided with dedicated low energy lighting. All external lighting is to be movement censor controlled and fitted with dedicated high efficiency light fittings.

Electrical layouts

The exact position of Electric lighting and power points to be agreed with the client prior to installation, The qualified electrician to advise the client on the minimum requirements of Building Control and the electrical specification required to meet the requirements of Part M and Part P

Access and Facilities for Disabled People

All light switches are to be no higher than 1200 mm above the finished floor level and all power sockets are to be min. 450 mm above finished floor level

Fire Protection.

A mains-powered and inter-connected fire alarm system will be provided for whole house protection. Mains-powered smoke alarms to be interlinkable, powered from a light fitting and fulfill BS5839 part 6 Grade D, E or F. where smoke detectoers are used within living rooms these should have optical detectors or heat detectors should be fitted 230V Hard-wired heat detector Fully conforming to BS 5839 Pt 6 Grade D

Building Regulations Only. Named products.

Where products are named in the specification the developer can substitute similar products provided the specification of the products meets or exceeds the selected product specification.

