

85 & 87 GREEN LANE BUXTON

3038-01-03 SPECIFICATION

September 2024

GENERAL

All dimensions should be checked on site where possible, any discrepancies should be reported to the Architect immediately before work proceeds.

All works and materials to comply with the recommendations and requirements of all current relevant British Standards, Codes of Practice, Building Regulations and Construction Design and Management Regulations. Workmanship to be in accordance with BS 8000.

All work is to comply with the relevant Building Regulations and all statutory notices are to be given to the Building Control department at the local authority at the appropriate stages. If an Approved Inspector is appointed then the AI must notify the local authority that the Initial Notice Procedure will apply to Building Regulations.

All products and materials to be CE marked and utilised fully in accordance with the manufacturers/suppliers recommendation and instructions. All structural timber to be C24 grade (unless otherwise stated) and be preservative treated.

Where no British Standards Codes of Practice exist for operations, the workmanship shall conform to the highest standards laid down by the operative's trade federation, recognised good practice and appropriate agreement certificates.

The Building Contractor is to provide all necessary on and off-site management and supervision, standard Health & Safety Executive (HSE) provisions in accordance with Contract Design Management (CDM) procedures, together with a Pre-Construction Health & Safety Plan. The Building Contractor is to inform the employer of the name of the person in charge for the site administration of the works.

Contractor to trace all pipework/ services in the vicinity of the proposed works to confirm live and redundant services and take appropriate measures to protect services and ensure safety of operatives.

1.0 FOUNDATIONS

- 1.1 Existing foundations to take additional loads to be checked by Structural Engineer / Building Control.
Foundations to comply in all respects to BS.8004/8110: 1986 and taken down to a load bearing strata as agreed with structural engineer and Building Control to adequately transmit all applied loads. Construction detail and mix all in accordance with Structural Engineer's design.
All materials for foundation and structure below damp proof course should conform to the relevant British Standards and code of practice for foundations BS5572. Concrete blocks or engineering brickwork used below ground level to be certified suitable for this purpose.
Foundation to be taken down to the invert of any drain where the drain is within 1m of the foundation.

2.0 EXTERNAL WALLS

2.1 Existing walls to be reconstructed as necessary using existing stones where possible, stabilised and grouted, all as structural engineer's details. Walls generally to be repointed lime mortar as 2.2 below. Form new openings with stone outer lintels to match existing and as engineer's details.

2.2 REPOINTING

Joints to be carefully raked out by hand to a minimum depth of 25mm. Care is to be taken to ensure no damage is caused to the stonework and mechanical tools should not be used (disc cutters etc.). All joints are to be flushed out with clean water and repointed using a lime mortar: one-part Ionic NHL3.5 (Old White) to 1½ parts iron-stained silica sand, to 1-part Nosterfield brown washed river sand, to ½ part clinker ash with black mineral pigment; aggregate size 5mm down. Joints generally to be flush with stonework. Where joints widen out due to erosion of the existing stone the pointing is to be kept back to ensure that a consistent visual joint is achieved. Perpenders are to run into horizontal bed joints without any clear definition or lining occurring such that the mortar should visually transfer from perpend to bed joint in a smooth manner. Once the joint is filled and when still damp but with a semi-hard consistency the mortar is to be hit with a stiff bristled churn brush to compact the mortar, remove laitance and expose the aggregate.

2.3 EXTERIOR WALL FINISH

All exterior walls to receive a thin coat of lime slurry, brush applied and worked into joints and cracks, then a limewash finish applied in a minimum of 4 coats. Colour to be agreed.

Note: Sample area 1200 x 1200mm to be prepared in advance of work being undertaken and finish agreed with the Local Authority Planning Dept.

2.4 NEW WALLS

New masonry walls to extensions to be formed in outer leaf of coursed limestone rubble to match existing laid in lime mortar as item 5.2 above, 110mm overall cavity, with 60mm Kingspan K108 insulation, 100mm medium density concrete blockwork. U value to be 0.3W/m²K. Bonding to existing walls as engineer's details. Hyload DPC, 150mm from ground level and insulated cavity closer/vertical dpc at openings. Allow for wall ties and straps to wall plate etc. New walls to be laid on new concrete strip foundations to engineer's details.

2.5 WALL TIES

Stainless steel ties suitable for block/stone construction. Evenly spaced at 600mm horizontally, staggered in alternate courses and at 450mm centres vertically. Double up wall ties at all openings, placing ties within 225mm of reveals. Provide final row of wall ties maximum 150mm from wall plate level.

2.6 WALL PLATE STRAPPING

50 x 100mm C16 wall plate strapped to inner leaf with 30 x 5mm stainless steel straps at least 1m in length at 1800mm centres or as directed by engineer.

2.7 INTERNAL FINISH

2 coats Ultra Lime insulating plaster as manufactured by Lime Green applied in accordance with manufacturer's recommendations, gently following masonry wall contours, soft edges at openings and returns. Earthborn or similar breathable emulsion paint finish.

3.0 FLOORS

3.1 GROUND FLOOR

Existing stone flags: remove any debris and surface dirt and carry out initial clean with water and stiff brush, removing water with wet vacuum equipment. Carefully clean using Vulpex pH neutral soap as supplied by Picreator Enterprises diluted 1:6 with clean water, agitate with stiff brush and remove with wet vacuum. Repeat as necessary. Once clean, flags to be numbered and photogrammetrically surveyed to record position. Flags then to be lifted and stored for re-use.

Stone flags to be relaid in original positions on lime mortar bed on 100mm glass fibre reinforced eminently hydraulic lime screed with underfloor pipework clipped to lightweight steel reinforcing mesh on geotextile membrane on min 250mm Glapor recycled glass insulating aggregate on geotextile on earth, full build up vapour permeable. New stone flags to match existing to be incorporated as necessary. New floors to extensions to be as above construction with new stone flag finish to match existing. Construction to achieve U value of 0.23W/m²K.

3.2 FIRST FLOOR

New engineered oak boarding on new, well seasoned oak joists and supporting beams with arrises gently chamfered. Joists and beams to structural engineer's design/specification. Proprietary underfloor heating system between joists to specialist design. 15mm soundblock-F plasterboard to be cut to fit between floor joists, screwed to 50 x 50mm SW battens with 50mm Rockwool acoustic insulation between. 10mm Solo single coat lime plaster to be applied to plasterboard with Earthborn Ecopro Silicate Breathable Masonry Paint finish, leaving joists exposed. Joists to have wax finish.

4.0 ROOF

4.1

Existing stone slates relaid in diminishing courses and fixed with copper nails to treated SW battens on Tyvek Supro or similar breathable felt on new 175mm treated SW rafters as structural engineer's details. Any new stone slates to match existing exactly. Use all sound existing tiles on one property and any imported tiles on discrete roof slopes.

Refit existing ridge tiles, neatly bedding in NHL5.0 lime mortar.

Note: Roof works undertaken as part of emergency repairs 2022

5.0 RAINWATER GOODS

5.1

New gutters and downpipes to be powder coated Alumasc Heritage Cast Aluminium half round with round downpipes to match original and sized to suit run off. Gutters to be supported on Alumasc cast aluminium rise and fall brackets to suitable fall. Down pipes to be fitted with suitable shoes and to discharge to soakaways in accordance with structural engineer's details via new clay gullies with cast iron grilles.

6.0 INTERNAL WALLS

6.1 ALTERATIONS

Form new openings where indicated, incorporating beams or Naylor pre-cast concrete lintels as necessary in accordance with engineer's details. Make good where disturbed by alterations. Block up openings in masonry walls in solid common brickwork of min 7N/mm²

6.2 NEW INTERNAL PARTITIONS

New stud partition walls to be 50 x 70 treated SW studwork with 9mm OSB and 15mm beaded T+G softwood boarding each side. Voids between studs to be filled 70mm Rockwool RW3 acoustic insulation tightly fitted; all gaps to be filled. Eggshell paint finish.

7.0 CEILINGS

7.1 FIRST FLOOR

Insulation generally to be fitted between rafters to form sloping ceilings. 150mm Kingspan Kooltherm Pitched Roof Board to be tightly fitted between 175mm rafters allowing 25mm for drape of breather membrane. Insulation to be fitted with no gaps and level with bottom of rafters. 32.5mm insulated plasterboard to be fitted to underside of rafters, 10 mm Solo single coat lime plaster and Earthborn Ecopro Silicate Breathable Masonry Paint finish to give U value 0.15W/m²K. SW purlins and ridge to remain exposed and to be sanded and finished in white Woodwash stain by lakelandpaints.co.uk, matt finish.

7.2 GROUND FLOOR

15mm soundblock plasterboard to be cut to fit between floor joists, screwed to 50 x 50mm SW battens with 50mm Rockwool acoustic insulation between. 10mm Solo single coat lime plaster to be applied to plasterboard with Earthborn Ecopro Silicate Breathable Masonry Paint finish, leaving joists exposed. Joists to have wax finish.

8.0 DOORS & WINDOWS

8.1 New doors and windows to be manufactured in Accoya acetylated softwood with exterior eggshell paint finish.
Glass below 800mm above FFL to be safety glass to BS 6206.

8.2 Doors generally to be board and batten as detail, boards to be beaded T+G. External glazed doors to be bead glazed and fitted with 24mm double glazed units. U values to be 1.6 W/m²K.

8.3 Windows to be side hung casement with single glazing bars to match original sections as detail, putty glazed with 11mm ultrathin double glazed units 4mm low E inner pane; 4mm krypton filled cavity; outer pane 3mm cylinder glass. U values to be 1.5 W/m²K or better.

8.4 ROOF WINDOWS

New roof windows to be Stella Conservation Roof Light with integral glazing bars, set below slate line and installed complete with flashing kit to achieve U-value of 1.6W/m²K.

9.0 DRAINAGE

9.1 INTERNAL DRAINAGE

All internal drainage to be solvent welded upvc pipework, 38mm diam from washbasins, sinks, showers and baths, 50mm diam for all combined pipework from more than one fitting, 100mm diam from WC's. System to be vented via 100mm diam cast iron SVP installed externally in accordance with BS EN 12380

and terminating at eaves level. New SVP's to be cast iron from Traditional LCC range by rainclear.co.uk.

All sanitary pipework to comply with BS5572. All fittings to have 75mm deep seal bottle traps or similar approved anti vac traps. All traps are to be removable.

Pipework generally to be concealed and run in floor void.

9.2 FOUL DRAINAGE

Foul drainage to discharge to a new mini treatment plant with suitably sized drainage field for discharge of treated clean water.

Where possible connect to existing drainage points with minimum new drainage.

Where new drainage is necessary, comply with the following:

New clay pipelines to be Hepworth Clay Supersleve 100 laid to a minimum gradient of 1:80 in accordance with manufacturer's recommendations. Trenches to have vertical sides and be 450mm wide; replace soft spots with well tamped bedding bedding material. Pipes to be laid on min 50mm bed of 10mm compacted single size granular material. Backfill to 150 mm above crown of pipe with a protective cushion of selected fill, free from vegetable matter, rubbish and frozen soil and material retained on a 40 mm sieve. Thoroughly hand compact in 100 mm layers.

Form 90 deg nominal rest band, radius 200mm to centre line of pipe at base of soil stack and bed in 150mm thick concrete. Inspection chambers to be Hepworth PPIC, installed in accordance with manufacturer's recommendations on min 100mm thick 10mm granular bedding, with 100mm concrete collar and aluminium cover plate and surround. See engineer's drawings for details.

Flush out the whole installation and remove silt and debris immediately before handing over.

9.3 SURFACE WATER

Rainwater from new downpipes to discharge into new soakaway located a minimum of 5m from building. Soakaways to be sized in accordance with BRE Digest 365 following an on-site percolation test; invert of pipes to be a minimum of 600mm below base of soakaway; to be lined with geotextile sheet & filled with suitable rubble / granular material; access chambers to be provided within soakaway with 225mm perforated pipe provided to base of soakaway; soakaway to be backfilled with minimum 600mm topsoil. See engineer's drawings for details.

10.0 VENTILATION

10.1 Ventilation of habitable rooms to be provided by openable windows with opening lights minimum 20% of floor space. Background ventilation is to be provided by two-position locking handles to casements to allow trickle ventilation in a secure manner.

All new windows to be fully draught stripped to limit the infiltration of cold air and maintain an airtight envelope.

10.2 Bathroom and toilet ventilation to provide 15lts per second via QuietAir QT100 extraction fan as manufactured by airflow.com ducted to new 100mm cast iron Conservation Vent grille on outside wall complete with spigot and insect mesh as supplied by castironairbricks.co.uk, operated by light switch with separate isolation switch and 15min overrun. External grille colour to match stonework.

10.3 Kitchen ventilation to provide 30lts sec extract via kitchen cooker extract hood ducted to outside wall with cast iron grille as above.

11.0 FITTINGS

11.1 STAIRCASE

The rise and going to comply with the following: maximum rise of 220mm; minimum going of 220mm; maximum pitch of 42 deg; twice the rise plus the going to be between 550 and 700mm; minimum 50mm going on tapered treads. Ensure a minimum 2000mm headroom over pitch line of stairs and landing areas.

Provide a handrail to one side of the staircase at a height of between 900mm measured to the top of the handrail from the pitch line of the stairs. At floor level and landing height of handrail to be 1100mm. Balusters to be 32mm square, max 99mm apart, with simple handrail profile.

11.2 SANITARY

Supply and fit sanitaryware to bathrooms – Burlington or similar range to be confirmed. Bath panels and any pipe boxings to be 15mm beaded T+G softwood boarding with eggshell finish. Showers to have tile backer board with ceramic tile finish.

11.3 KITCHENS

Shaker style units with white quartz worktops and white ceramic Belfast type sink. All fittings and finishes to be confirmed.

12.0 ELECTRICAL INSTALLATION

12.1 ELECTRICAL INSTALLATION GENERALLY

All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS.7671, the latest edition of the IEE Wiring Regulations and Building Regulations Part P (Electrical Safety) by a competent person registered with an electrical self-certification body authorised by the Secretary of State. Prior to completion an electrical installation certificate to be issued to both the client and the Building Control.

Buildings to have new electrical supply and complete new installation.

12.2 LIGHTING

See Electrical Layout. New fire-rated LED recessed ceiling down lighters to kitchen, bathroom, toilet.

All new light fittings to be low energy with a luminous efficacy of 45 lamp lumens/circuit Watt or better. All new switches and sockets to be mounted between 450mm and 1200mm above finished floor level, position to be agreed.

All lighting to be warm white LED 3000K.

12.3 EMERGENCY LIGHTING

Emergency lighting is to be provided to all exit routes in accordance with BS 5266-1:2016.

12.4 FIRE DETECTION

LD1 category fire detection and alarm system to be installed throughout the premises in accordance with BS 5839-6:2019, incorporating detectors in all circulation areas that form part of the escape routes from the premises, and in all rooms and areas, other than those with negligible sources of ignition, such as toilets, bathrooms and shower rooms. If ceiling mounted they should be 300mm from the walls and light fittings. Kitchen to be fitted with heat detector.

13.0 HEATING

- 13.1 Heating to be provided to all habitable spaces by low pressure hot water underfloor system connected to new air source heat pump located externally. System to be capable of achieving 21 degC when the outside temperature is -3 degC. Bathrooms to have heated towel rails fitted with thermostatic controls. Specialist contractor is responsible for the design of complete installation and is to include for the production of design and installation drawings for approval prior to installation and for the production of all necessary heat loss calculations to satisfy Building Regulations.
Ground and first floor heating to be separately zoned and thermostatically controlled. System to be fitted with suitable controller and time clock.
The whole of the space heating and hot water system controls are to comply with BS5864: 1989. All pipes and ducts where passing through unheated areas or outside are to be insulated to BS 5422: 2001.
The whole of the installation is to be commissioned on completion and a certificate issued to both the client and Building Control.
- 13.2 **PLUMBING**
Kitchens, bathroom and toilets are to be supplied with hot and cold water. Hot water to be via air source heat pump with storage. All new plumbing works to be in copper and securely clipped. All pipework within unheated spaces to be insulated to comply with part L of the Building Regulations.
All installations to be in accordance with the latest edition of the Domestic Building Services Compliance Guide.
- 14.0 FIREPLACES**
- 14.1 No85
FP85.01 (Dining): Stitch repair broken stone lintel and repoint stone jambs. Carefully remove inner stonework and grate. Fit new sandstone hearth with 50mm step up from general FFL and projecting min 150mm each side and 300mm in front of fire bed to meet Part J of the Building Regulations. Clean and refit inner stonework. Repair iron grate and reset. Ensure chimney clean and fire in working order.
- 14.2 No85
FP85.02 (Lounge): Remove existing iron range and set aside for possible reuse elsewhere. Existing fireplace to be carefully removed and refixed in new position on reverse side of wall. Connect to existing flue. Fit new sandstone hearth with 50mm step up from general FFL and projecting min 150mm each side and 225mm in front of stove to meet Part J of the Building Regulations. Fit new cast iron multi-fuel stove with 904/904 flue liner as necessary.
- 14.3 No 87
FP87.01 (kitchen): Ensure jambs and lintel of fireplace are stable, repoint in lime mortar as necessary. Fit new sandstone hearth with 50mm step up from general FFL and projecting min 150mm each side and 225mm in front of stove to meet Part J of the Building Regulations. Fit new cast iron multi-fuel stove with 904/904 flue liner as necessary.

14.4 No87

FP87.02 (Lounge): Repair brickwork jamb where damaged left hand side in brick to match existing and lime mortar. Fit new sandstone hearth with 50mm step up from general FFL and projecting min 150mm each side and 225mm in front of stove to meet Part J of the Building Regulations. Repair chimney in red engineering brick and lime mortar. Fit new cast iron multi-fuel stove with flue liner as necessary.