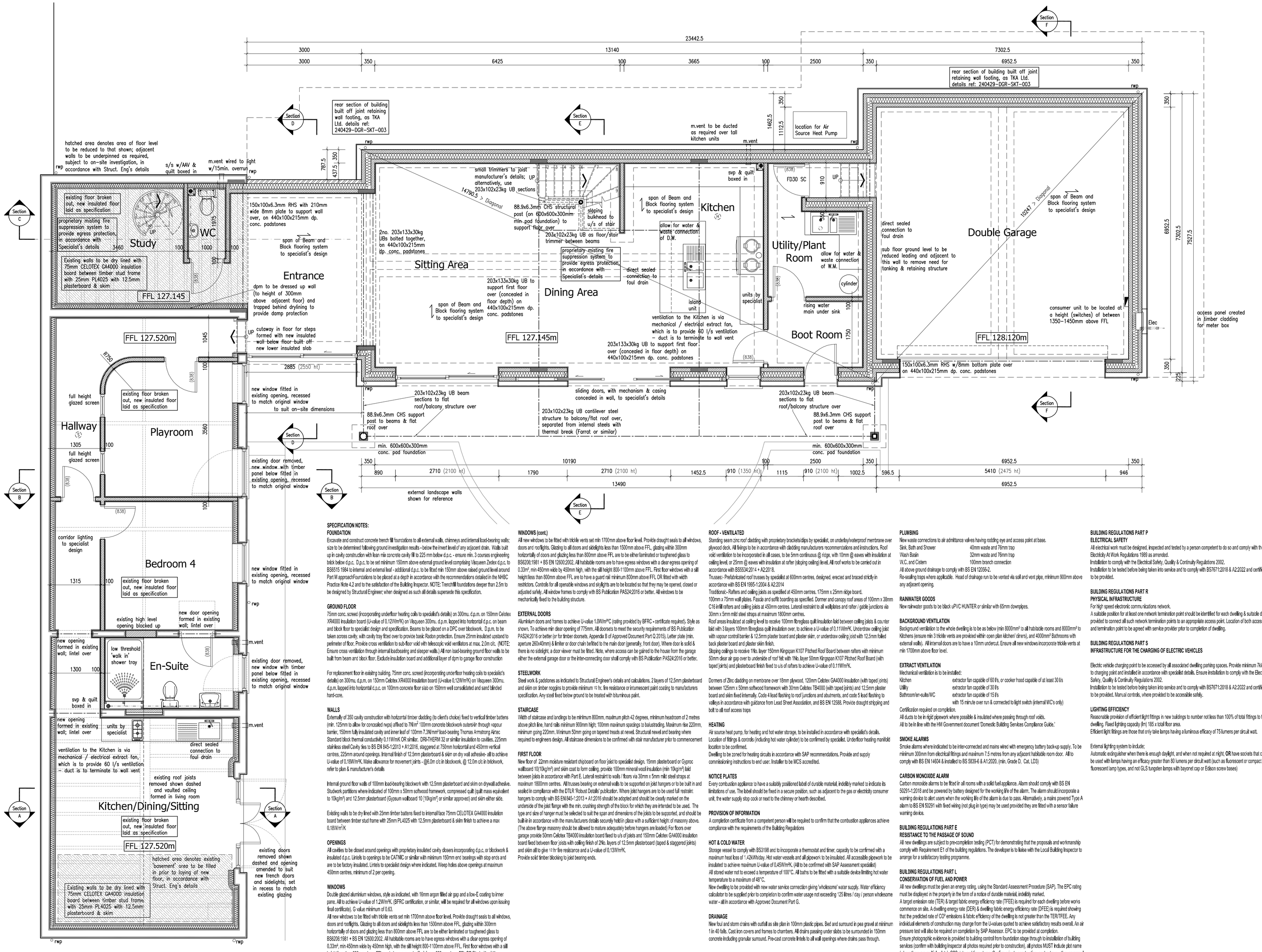


Ground Floor Plan
Scale 1:50

SPECIFICATION NOTES:

FOUNDATION
Excavate and construct concrete trench fill foundations to all external walls, chimneys and internal load-bearing walls; size to be determined following ground investigation results - below the invert level of any adjacent drain. Walls built up in cavity construction with lean mix concrete cavity fill to 225 mm below d.p.c. - ensure min. 3 courses engineering brick below d.p.c.. D.p.c. to be set minimum 150mm above external ground level comprising Vibcueen Zeder d.p.c. to BS6515: 1984 to internal and external leaf - additional d.p.c. to be fitted min 150mm above raised ground level around Part M approved Foundations to be placed at a depth in accordance with the recommendations detailed in the NHBC Practice Note 4.2 and to the satisfaction of the Building Inspector. NOTE: Trench fill foundations deeper than 2.5m to be designed by Structural Engineer; when designed as such all details supersede this specification.

GROUND FLOOR
75mm conc. screed (incorporating underfloor heating coils to specialist's details) on 300mu. d.p.m. on 150mm Celotex XR4000 insulation board (U-value of 0.12W/m²K) on Vibcueen 300mu. d.p.m. lapped into horizontal d.p.c. on beam and block floor to specialist design and specification. Beams to be placed on a SPC over blockwork. D.p.m. to be taken across cavity, with cavity tray fitted over to provide basic Radon protection. Ensure 25mm insulated upstand to perimeter of floor. Provide cross ventilation to sub-floor void with telescopic void ventilators at max. 2.0m c/c. (NOTE: Ensure cross ventilation through internal loadbearing and sleeper walls.) All non load-bearing ground floor walls to be built from beam and block floor. Exclude insulation board and additional layer of dpm to garage floor construction

For replacement floor in existing building, 75mm conc. screed (incorporating underfloor heating coils to specialist's details) on 300mu. d.p.m. on 150mm Celotex XR4000 insulation board (U-value 0.12W/m²K) on Vibcueen 300mu. d.p.m. lapped into horizontal d.p.c.on on 100mm concrete floor slab on 150mm well consolidated and sand blinded hard-core.

WALLS
Externally of 350 cavity construction with horizontal timber cladding (to client's choice) fixed to vertical timber battens (min. 125mm to allow for concealed rwps) affixed to 7N/m² 100mm concrete blockwork outerskin through vapour barrier, 150mm fully insulated cavity and inner leaf of 100mm 7.3N/mm² load-bearing Thomas Armstrong Aircac Standard block thermal conductivity 0.11W/mK OR similar. DRI-THERM 32 or similar insulation to cavities. 225mm stainless steel Cavity Ties to BS EN 845-1:2013 + A1:2016, staggered at 750mm horizontal and 450mm vertical centres. 225mm around openings. Internal finish of 12.5mm plasterboard & skim on dry wall adhesive- all to achieve U-value of 0.16W/m²K. Make allowance for movement joints - @6.0m c/c in blockwork, @ 12.0m c/c in brickwork, refer to plan & manufacturer's details

Internal ground floor walls of 100mm load-bearing blockwork with 12.5mm plasterboard and skim on drywall adhesive. Studwork partitions where indicated of 100mm x 50mm softwood framework, compressed quilt (quilt mass equivalent to 10kg/m³) and 12.5mm plasterboard (Gypsum wallboard 10 [10kg/m², or similar approved) and skim either side.

Existing walls to be dry lined with 25mm timber battens fixed to internal face 75mm CELOTEX GA4000 insulation board between timber stud frame with 25mm PL4025 with 12.5mm plasterboard & skim finish to achieve a max 0.18W/m²K

OPENINGS
All cavities to be closed around openings with proprietary insulated cavity closers incorporating d.p.c. or blockwork & insulated d.p.c. Lintels to openings to be CATNIC or similar with minimum 150mm end bearings with stop ends and are to be factory insulated. Lintels to specialist design where indicated. Weep holes above openings at maximum 450mm centres, minimum of 2 per opening.

WINDOWS
Double glazed aluminium windows, style as indicated, with 16mm argon filled air gap and a low-E coating to inner pane. All to achieve U-value of 1.2W/m²K (BFRC certification, or similar, will be required for all windows upon issuing final certificate). G value minimum of 0.63.
All new windows to be fitted with trickle vents set min 1700mm above floor level. Provide draught seals to all windows, doors and rooflights. Glazing to all doors and sidelights less than 1500mm above FFL, glazing within 300mm horizontally of doors and glazing less than 800mm above FFL are to be either laminated or toughened glass to BS6206:1981 + BS EN 12600:2002. All habitable rooms are to have egress windows with a clear egress opening of 0.33m², min 450mm wide by 450mm high, with the sill height 800-1100mm above FFL. First floor windows with a sill height less than 800mm above FFL are to have a guard rail minimum 800mm above FFL OR fitted with width restrictors. Controls for all openable windows and skylights are to be located so that they may be opened, closed or adjusted safely. All window frames to comply with BS Publication PAS24:2016 or better.

WINDOWS (cont.)
All new windows to be fitted with trickle vents set min 1700mm above floor level. Provide draught seals to all windows, doors and rooflights. Glazing to all doors and sidelights less than 1500mm above FFL, glazing within 300mm horizontally of doors and glazing less than 800mm above FFL are to be either laminated or toughened glass to BS6206:1981 + BS EN 12600:2002. All habitable rooms are to have egress windows with a clear egress opening of 0.33m², min 450mm wide by 450mm high, with the sill height 800-1100mm above FFL. First floor windows with a sill height less than 800mm above FFL are to have a guard rail minimum 800mm above FFL OR fitted with width restrictors. Controls for all openable windows and skylights are to be located so that they may be opened, closed or adjusted safely. All window frames to comply with BS Publication PAS24:2016 or better. All windows to be mechanically fixed to the building structure.

EXTERNAL DOORS
Aluminium doors and frames to achieve U-value 1.0W/m²C (rating provided by BFRC + certificate required), Style as shown. To achieve min clear opening of 775mm. All doorsets to meet the security requirements of BS Publication PAS24:2016 or better (or for timber doorsets, Appendix B of Approved Document Part Q 2015). Letter plate (min. aperture 260x40mm) & limiter or door chain bellited to the main door (generally, front door). Where door is solid & there is no sidelight, a door viewer must be fitted. Note, where access can be gained to the house from the garage either the external garage door or the inter-connecting door shall comply with BS Publication PAS24:2016 or better.

STEELWORK
Steel work & padstones as indicated to Structural Engineer's details and calculations, 2 layers of 12.5mm plasterboard and skim on timber noggins to provide minimum 1/2 hr. fire resistance or intumescent paint coating to manufacturers specification. Any steel fixed below ground to be treated with bituminous paint.

STAIRCASE
Width of staircase and landings to be minimum 800mm, maximum pitch 42 degrees, minimum headroom of 2 metres above pitch line, hand rails minimum 900mm high; 100mm maximum spacings to balustrading. Maximum rise 220mm, minimum going 220mm. Minimum 50mm going on tapered treads at newel. Structural newel and bearing where required to engineers design. All staircase dimensions to be confirmed with stair manufacturer prior to commencement

FIRST FLOOR
New floor of 22mm moisture resistant chipboard on floor joist to specialist design, 15mm plasterboard or Gyproc wallboard 10 [10kg/m²] and skim coat to form ceiling, provide 100mm mineral wool insulation (min 10kg/m³) laid between joists in accordance with Part E. Lateral restraint to walls / floors via 30mm x 5mm mild steel straps at maximum 1800mm centres. All trusses bearing on external walls to be supported on joist hangers or to be built in and sealed in compliance with the DTLR 'Robust Details' publication. Where joist hangers are to be used full restraint hangers to comply with BS EN 845-1:2013 + A1:2016 should be adopted and should be clearly marked on the underside of the joist flange with the min. crushing strength of the block for which they are intended to be used. The type and size of hanger must be selected to suit the span and dimensions of the joists to be supported, and should be built in accordance with the manufacturers details securely held in place with a sufficient height of masonry above. (The above flange masonry should be allowed to mature adequately before hangers are loaded) For floors over garage provide 50mm Celotex TB4000 insulation board fixed to u/s of joists and 150mm Celotex GA4000 insulation board fixed between floor joists with ceiling finish of 2No. layers of 12.5mm plasterboard (taped & staggered joints) and skim all to give 1/2 hr fire resistance and a U-value of 0.13W/m²K.
Provide solid timber blocking to joist bearing ends.

ROOF - VENTILATED
Standing seam zinc roof cladding with proprietary brackets/clips by specialist, on underlay/waterproof membrane over plywood deck. All fittings to be in accordance with cladding manufacturers recommendations and instructions. Roof void ventilation to be incorporated in all cases, to be 5mm continuous @ ridge, with 10mm @ eaves with insulation at ceiling level, or 25mm @ eaves with insulation at rafter (sloping ceiling) level. All roof works to be carried out in accordance with BS5534:2014 + A2:2018.
Trusses:- Prefabricated roof trusses by specialist at 600mm centres, designed, erected and braced strictly in accordance with BS EN 1995-1:2004 & A2:2014
Traditional:- Rafters and ceiling joists as specified at 450mm centres, 175mm x 25mm ridge board,
100mm x 75mm wall plates. Fascia and soffit boarding as specified. Dormer and canopy roof areas of 100mm x 38mm C16 infill rafters and ceiling joists at 450mm centres. Lateral restraint to all wallplates and rafter / gable junctions via 30mm x 5mm mild steel straps at maximum 1800mm centres.
Roof areas insulated at ceiling level to receive 100mm fibreglass quilt insulation laid between ceiling joists & counter laid with 3 layers 100mm fibreglass quilt insulation over, to achieve a U-value of 0.11W/m²K. Underdraw ceiling joist with vapour control barrier & 12.5mm plaster board and plaster skim, or underdraw ceiling joist with 12.5mm foiled back plaster board and plaster skim finish.
Sloping ceilings to receive 11No. layer 150mm Kingspan K107 Pitched Roof Board between rafters with minimum 50mm clear air gap over to underside of roof felt with 1No. layer 50mm Kingspan K107 Pitched Roof Board (with taped joints) and plasterboard finish fixed in a score rafters to achieve U-value of 0.11W/m²K.

Dormers of Zinc cladding on membrane over 18mm plywood, 120mm Celotex GA4000 Insulation (with taped joints) between 125mm x 50mm softwood framework with 30mm Celotex TB4000 (with taped joints) and 12.5mm plater board and skim fixed internally. Code 4 lead flashing to roof junctions and abutments, and code 5 lead flashing to valleys in accordance with guidance from Lead Sheet Association, and BS EN 12588. Provide draught stripping and bolt to all roof access traps

HEATING
Air source heat pump, for heating and hot water storage, to be installed in accordance with specialist's details. Location of fittings & controls (including hot water cylinder) to be confirmed by specialist. Underfloor heating manifold location to be confirmed,
Dwelling to be zoned for heating circuits in accordance with SAP recommendations. Provide and supply commissioning instructions to end user. Installer to be MCS accredited.

NOTICE PLATES
Every combustion appliance to have a suitably positioned label of durable material, indelibly marked to indicate its limitations of use. The label should be fixed in a secure position, such as adjacent to the gas or electricity consumer unit, the water supply stop cock or next to the chimney or hearth described.

PROVISION OF INFORMATION
A completion certificate from a competent person will be required to confirm that the combustion appliances achieve compliance with the requirements of the Building Regulations

HOT & COLD WATER
Storage vessel to comply with BS3198 and to incorporate a thermostat and timer, capacity to be confirmed with a maximum heat loss of 1.42kWh/day. Hot water vessels and all pipework to be insulated. All accessible pipework to be insulated to achieve maximum U-value of 0.45W/mK. (All to be confirmed with SAP Assessment specialist)
All stored water not to exceed a temperature of 100°C. All baths to be fitted with a suitable device limiting hot water temperature to a maximum of 48°C.
Now dwelling to be provided with new water service connection giving 'wholesome' water supply. Water efficiency calculator to be supplied prior to completion to confirm water usage not exceeding '125 litres / day / person wholesome water - all in accordance with Approved Document Part G.

DRAINAGE
New foul and storm drains with outfall as site plan in 100mm plastic pipes. Bed and surround in pea gravel at minimum 1 in 40 falls. Cast iron covers and frames to chambers. All drains passing under slabs to be surrounded in 150mm concrete including granular surround. Pre-cast concrete lintels to all wall openings where drains pass through.

PLUMBING
New waste connections to air admittance valves having rodding eye and access point at base.

Sink, Bath and Shower	40mm waste and 76mm trap
Wash Basin	32mm waste and 76mm trap
W.C. and Cistern	100mm branch connection

All above ground drainage to comply with BS EN 12056-2.
Re-sealing traps where applicable. Head of drainage run to be vented via soil and vent pipe, minimum 900mm above any adjacent opening.

RAINWATER GOODS
New rainwater goods to be black uPVC HUNTER or similar with 65mm downpipes.

BACKGROUND VENTILATION
Background ventilation to the whole dwelling is to be as below (min 8000mm² to all habitable rooms and 8000mm² to Kitchens (ensure min 3 trickle vents are provided within open plan kitchen/ diners), and 4000mm² Bathrooms with external walls). All internal doors are to have a 10mm undercut. Ensure all new windows incorporate trickle vents at min 1700mm above floor level.

EXTRACT VENTILATION
Mechanical ventilation is to be installed:

Kitchen	extractor fan capable of 60 l/s, or cooker hood capable of at least 30 l/s
Utility	extractor fan capable of 30 l/s
Bathroom/en-suite/WC	extractor fan capable of 15 l/s with 15 minute over run & connected to light switch (internal WC's only)

Certification required on completion.
All ducts to be in rigid pipework where possible & insulated where passing through roof voids.
All to be in line with the HM Government document 'Domestic Building Services Compliance Guide.'

SMOKE ALARMS
Smoke alarms where indicated to be inter-connected and mains wired with emergency battery back-up supply. To be minimum 300mm from electrical fittings and maximum 7.5 metres from any adjacent habitable room door. All to comply with BS EN 14604 & installed to BS 5839-6 & A1:2020, (min. Grade D. Cat. LD3)

CARBON MONOXIDE ALARM
Carbon monoxide alarms to be fitted in all rooms with a solid fuel appliance. Alarm should comply with BS EN 50291-1:2018 and be powered by battery designed for the working life of the alarm. The alarm should incorporate a warning device to alert users when the working life of the alarm is due to pass. Alternatively, a mains powered Type A alarm to BS EN 50291 with fixed wiring (not plug in type) may be used provided they are fitted with a sensor failure warning device.

BUILDING REGULATIONS PART E
RESISTANCE TO THE PASSAGE OF SOUND
All new dwellings are subject to pre-completion testing (PCT) for demonstrating that the proposals and workmanship comply with Requirement E1 of the building regulations. The developer is to liaise with the Local Building Inspector to arrange for a satisfactory testing programme.

BUILDING REGULATIONS PART L
CONSERVATION OF FUEL AND POWER
All new dwellings must be given an energy rating, using the Standard Assessment Procedure (SAP). The EPC rating must be displayed in the property in the form of a notice of durable material, indelibly marked.
A target emission rate (TER) & target fabric energy efficiency rate (TFEE) is required for each dwelling before works commence on site. A dwelling energy rate (DER) & dwelling fabric energy efficiency rate (DFEE) is required showing that the predicted rate of CO² emissions & fabric efficiency of the dwelling is not greater than the TER/TFEE. Any individual elements of construction may change from the U-values quoted to achieve satisfactory results overall. An air pressure test will also be required on completion by SAP Assessor. EPC to be provided at completion.
Ensure photographic evidence is provided to building control from foundation stage through to installation of building services (confirm with building Inspector all photos required prior to construction), all photos MUST include plot name (where there are multiple plots), GPS data and time stamp. Confirm prior to construction, contractor or other personnel to be appointed to manage all photographic evidence throughout construction.

BUILDING REGULATIONS PART P
ELECTRICAL SAFETY
All electrical work must be designed, inspected and tested by a person competent to do so and comply with the Electricity At Work Regulations 1989 as amended.
Installation to comply with the Electrical Safety, Quality & Continuity Regulations 2002.
Installation to be tested before being taken into service and to comply with BS7671:2018 & A2:2022 and certification to be provided.

BUILDING REGULATIONS PART R
PHYSICAL INFRASTRUCTURE
For high speed electronic communications network.
A suitable position for at least one network termination point should be identified for each dwelling & suitable ducting provided to connect all such network termination points to an appropriate access point. Location of both access point and termination point to be agreed with service provider prior to completion of dwelling.

BUILDING REGULATIONS PART S
INFRASTRUCTURE FOR THE CHARGING OF ELECTRIC VEHICLES

Electric vehicle charging point to be accessed by all associated dwelling parking spaces. Provide minimum 7kW power to charging point and installed in accordance with specialist details. Ensure installation to comply with the Electrical Safety, Quality & Continuity Regulations 2002.
Installation to be tested before being taken into service and to comply with BS7671:2018 & A2:2022 and certification to be provided. Manual controls, where provided to be accessible safely.

LIGHTING EFFICIENCY
Reasonable provision of efficient light fittings in new buildings to number not less than 100% of total fittings to the dwelling. Fixed lighting capacity (lm) 185 x total floor area.
Efficient light fittings are those that only take lamps having a luminous efficacy of 75 lumens per circuit watt.

External lighting system to include;
Automatic extinguisher when there is enough daylight, and when not required at night, **OR** have sockets that can only be used with lamps having an efficacy greater than 80 lumens per circuit watt (such as fluorescent or compact fluorescent lamp types, and not GLS tungsten lamps with bayonet cap or Edison screw bases)

This drawing is to be read in conjunction with Drawing No. 21.4102.01 'Topographical Survey'

This drawing is to be read in conjunction with Drawing No.'s 21.4102.01 and 02 'Existing Details'

Revisions : A Regs/Planning/Struct. Calcs amendments 10.07.24

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DAVID GRANGER
ARCHITECTURAL DESIGN LIMITED

Project
Proposed New Dwelling
The Coach House
Rectory Lane
Market Bosworth, Warwickshire

Drawing Title
Production Drawing
Sheet 1 of 4

Client
Ms F. and Ms D. Sherwin

Drawing No.
21.4102.18 A

Date: May 2023
Scale (A1 Size): As Shown
Drawn by: JAC
Checked by: SF

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PRODUCTION DRAWING

PROPOSED NEW DWELLING ~ THE COACH HOUSE ~ RECTORY LANE ~ MARKET BOSWORTH ~ WARWICKSHIRE

1:50 Metres 0 1 2 3