DESCRIPTION OF DEVELOPMENT

Extension to rear.

GENERAL NOTES

1. In order to comply with air leakage test requirements, energy consumption calculations, acoustic design and, where applicable Robust Details; no deviation from these notes or changes of materials is permitted
2. To be read in conjunction with Structural Engineers drgs.
3. All to comply with manufacturers recommendations & specifications
4. All materials etc to be suitable for their purpose & location
5. All to comply with current Building Regulations, current British Standards & Agreement Certificates
6. All electrical work is to comply with the latest edition of BS 7671 and be installed by a NICEIC or ECA approved contractor
7. The Mechanical sub-contractor is to be a registered HVCA. All gas work to be carried out by a Registered Corgi fitter with the appropriate ACOP qualification for the works to be carried out. The Contractor is responsible for checking credentials with Gas Safe Registration Board before employment of sub-contractor
8. All workmanship is to comply with BS 8000 Workmanship on Building Sites
9. All work is to comply with the current Construction, Health, Safety & Welfare Regulations
10. All new timber to be pressure impregnated against rot & insect attack
11. All new timber to be obtained from FSC (Forestry Stewardship Council) or CSA (Canadian Standards Association) certified sources
12. All existing areas affected by works to be protected during site work & made good as necessary prior to completion

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STRUCTURAL WORK TO EXISTING BUILDING

To include forming openings through existing walls. Allow for designing & providing temporary support and for making good

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BUILDING NEAR TREES

When determining foundation formation level, the effects of the close proximity of trees both past, present and proposed, shall be considered with reference to the NHBCs practice note 3 'Building near Trees updates and the Zurich Building Guarantees Technical manual as appropriate.

FOUNDATIONS & STEELWORK

All as specified on Consulting Structural Engineer's drawings. Steelwork to be fire protected as noted elsewhere

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EXTERNAL WALL CONSTRUCTION - BELOW DPC LEVEL

103mm facing brickwork (minimum Class B semi engineering standard) minimum 4 courses below ground level trench blocks (minimum 7N/mm2) on both skins in ground condition. Provide wall ties at 750mm horizontal & 450mm vertical staggered centres. Fill cavity 225 below DPC with lean mix concrete

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DRAINAGE BELOW GROUND

Existing invert level of Foul Drains to be connected and checked for adequacy of fall confirmed prior to any other drain laying commencing. Connect to existing drainage system. All levels to chambers and manholes to be verified on site prior to drainage works commencing. Cover levels to be adjusted locally to suit finished ground level

Existing manhole to side of conservatory to be repositioned to comply with Southern water requirements:

No structure (footings, walls etc.) running parallel to the line of the existing public sewer is permitted **within 500mm** from the sewer/manhole. Any proposed structure within 3.00 metres of the public sewer, must have foundations to a depth of at least 150mm below the invert level of the sewer/manhole. Care must be taken when working in the area of the public sewer to ensure no damage is caused as any damages will be repaired at the client's expense.

The sewer is to be bridged by PCC lintels (where applicable). Please ensure that no additional load is transferred onto the sewer, adequate protection is provided, and construction works adheres to Building Control specifications.

Any new connections to the public sewerage system will require a **New Sewer Connection application** (we often refer to this as a Section 106) to be submitted and approved by Southern Water Services.

Where pipes pass through walls or foundations bridge over with 150mm deep precast concrete lintels to leave 50mm clearance around pipe and backfill with pea shingle. Beneath building bed and surround with 100mm pea shingle or other to LA approval

Inspection chambers with inverts less than 900mm to be 450mm diameter uPVC with 100mm concrete surround. Inspection chamber/manhole covers suitable for light traffic loads to vehicular access areas to BS497 Pt 1.

Inspection chambers with inverts greater than 900mm to be either:-

215mm semi-engineering brickwork in 1:3 cement:sand mortar built off 150mm thick concrete base, with granolithic benching, or PCC rings built off 225mm thick concrete base. PCC rings to be up to 1.2m diameter with 600x600mm access through RC cover. Surround rings with 100mm thick concrete. Build up 2 courses Class B semi-engineering brickwork around access. Vehicular duty cast iron cover over, surround rings with 100mm concrete

Surface water drains to be connected to soakaways minimum 5m from building. Allow for one 1.2x1.2x1m deep soakaway and one 0.9x0.9x1m deep soakaway. To consist of coarse rubble with porous geotextile membrane liner and concrete slab capping well below finished ground level. Final details to be agreed with the Building Inspector on site, allow for on site porosity test with Blg Inspector
Strip threshold drain to be provided to bi fold door screen and connected to existing drain.

It is assumed that all connections can be via the localised combined system drain.

Souther water is to be contacted and any formal agreement to re-establish the existing build over to be formalized via build over application and are to be agreed prior to construction works commencing.

DPC's

Laid a minimum 150mm above external finished ground level and linked to all DPC's and damp proof membrane (DPM). Ensure the DPM laps under the DPC for the full thickness of the inner leaf to form a continuous barrier, including under door cills DPC's are to be stepped according to external ground level interface.

Lay the DPC on a smooth bed of fresh mortar in one continuous length. Provide at least 100mm overlap at any joint or angle. Ensure the DPC is wide enough to span the full thickness of the wall including any finishes such as render. Ensure the DPC is visible externally

Cavity trays to be incorporated as appropriate

SUB FLOOR VENTILATION

Openings should match existing main house and not to be less than 1500mm2/m run of external wall or 500mm2/m of floor area, whichever gives the greater opening area. Any pipes needed to carry ventilating air should have a diameter of at least 100mm. Ventilation openings should incorporate suitable grilles which prevent the entry of vermin to the subfloor but do not resist the air flow unduly. Internal structural brick or blockwork walls springing from foundations are to have openings in wall to allow for cross flow ventilation. Use telescopic vents to ensure grilles are above ground level

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GROUND FLOOR CONSTRUCTION - BEAM & BLOCK

U value 0.15 W/m2K (p/a = 0.672

Minimum 75mm thick reinforced sand/cement screed laid with underfloor heating on 1000 gauge continuous polythene vapour control layer [.5] on 100mm thick Kingspan K103 insulation. Insulation also to be laid around floor perimeters, i.e. between edge of screed and inner leaf of all external walls. Insulation to be 20mm thick Kingspan, height to suit combined thickness of screed & insulation. All laid on 1200 gauge continuous dpm [0.9], lapped over dpc, on thin sand blinding on beam & block floor structure to specialist design. 150mm or to SE spec beams and blocks to be grouted together with 1:6 cement/sand mix. All pipes, services etc penetrating the floor to be sealed

Remove topsoil and vegetable matter & apply weed-killer to all areas beneath floor. Lay 1 square metre of 150mm thick pea gravel to form a sump at the lowest point of the ground beneath the beam & block floor. Install a 100mm Ø pipe to discharge water from the sump to storm-water drainage system

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EXTERNAL WALL CONSTRUCTION

'U' value = 0.15 W/m²K

O/A wall 452.5 mm structural (face of outer leaf to inside face of blockwork), + 12.5mm plasterboard on 15mm dabs. Stone quoins to sit 20mm in front of brickwork.

12.5 plasterboard, 15mm dabs, 100mm Standard blockwork inner leaf (K=0.49) 7.3 N/mm² to SE's design to SE design. 100mm kooltherm 108, 50mm airspace, 100mm standard blockwork outer leaf [k=0.49] 7.3 N/mm² to SE's design, 102.5 facing brickwork with napped flint panel. Facing brickwork to match very closely existing in size, colour and texture and mortar, samples to be provided before ordering bricks

Stainless steel safety wall ties at 750mm horizontal & 450mm vertically staggered centers and to all window/door reveals at 225mm vertical centres

Cavities to be closed at all openings with Kingspan Kooltherm fire resisting insulated cavity closer

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MOVEMENT JOINTS

Location of movement joints in external wall to be confirmed by the STRUCTURAL ENGINEER

Post to existing wall abutment to be provided with setting out bars or keyed into existing brickwork and supplied with a verticle dpc. The timber cladding abutment with the existing wall is to be fully wethered using a discreet concealed lead flashing behind timber cladding.

SE to design post connections and required strapping of post to the existing building.

The posts are to be encapsulated to 1 hr and fully insulated using 90mm kingspan 108 insulation board to a U value of 0.15

WHERE NEW WALLS ABUT EXISTING BUILDING

New walls to be attached to structure of existing building using Ancon Staifix Universal wall starter system comprising stainless steel channels bolted to the existing wall and stainless steel ties built into new masonry

Once channels have been fixed cut through the full depth of the outer leaf of the existing cavity walls and insert a continuous insulated DPC

Form a movement joint between both leaves & existing structure using closed cell polyethylene, mastic pointed externally and either plaster stops or exmet plaster reinforcement internally as required

LINTELS OVER EXTERNAL OPENINGS

All lintels are to be galvanised pre-insulated steel with 150mm minimum end bearings and supported at both ends on a full size uncut block. Type to suit clear opening, construction & loadings all as Structural Engineer's details. Form cavity trays with stop ends over as recommended by lintel manufacturer with proprietary coloured weepholes

AIR TIGHTNESS

Target air tightness at 50 pa is : 6 **m3/h/m²**

Ensure that all junctions between plasterboard, floors, ceilings, joists, electrical sockets & switches are sealed to attain the required air tightness. Do not build in structural timbers, use joist hangers if required

EDGE PROTECTION

GRS TAPER-LOC® Glass Railing Systems frameless glass with GR0V4M cap rail using 16mm glass and typical surface substrate mount detail with shoe rail to match top cap.

INTERNAL PARTITIONS

All new partitions to consist of 12.5mm thick plasterboard skim finish both sides 75x50 sw studs at 400mm centres with mineral fibre acoustic insulation between studs

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ACCREDITED CONSTRUCTION DETAILS

All work to be carried out in accordance with the following accredited construction details. Copies to be kept on site and signed off by site manager: tbc

WINDOWS & EXTERNAL DOORS

Overall U value of glazing and frame 1.4 W/m2K Steel section with 12mm thick Fireline boards fixed to steel, 20mm thick Kingspan insulation, a 1000 gauge polythene vapour control layer.Columns to be clad internally with 30mm solid oak cladding and externally with 47mm solid timber cladding. Column corner joints both internally and externally to be rebated to form a joint with the window, all joints to be tongue and grooved.

Aluminium composite triple glazed windows finished to match the existing house windows [dove grey] All windows to be fitted with easy clean hinges. Windows external doors & screens to be fitted with sealed triple glazed units to achieve stated U value but as a minimum incorporating 16mm Argon filled gap with low E glass to one of the panes, or equal
Glazing to bathrooms & toilets and where noted on the proposed elevations to be obscure (Pilkington 'Cotswold' obscurity level 5)
Kite marked safety glazing to be provided to all doors and screens below 1500mm & to any window below 800mm from finished floor or landing level. All 'casements' fixed or opening to have slot ventilators (see ventilation notes), all windows & doors to meet Secured By Design requirements (see security notes)

SECURITY

Windows to be designed to meet the security requirements of British Standards publication PAS 24:2012. Ground floor windows to be fitted with safety glass

External door frames to be mechanically fixed to the structure

Windows satisfying other standards should be similar or better than the standards states in Section 2 (2.2) of the Approved Document Q

LEVEL THRESHOLDS TO ACCESSIBLE DOOR OPENINGS

Form level pcc thresholds on DPC linked to DPM for external doors to boot room and living room. ACO or equal slot drain and proprietary weather bar on top, maximum upstand 15mm

Door thresholds leading onto terraces (i.e. part of bi-fold sliding and folding door system) are to be flush incorporating a drainage channel

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ROOF CONSTRUCTION - PITCHED, SLOPING SOFFIT, INSULATION BETWEEN & UNDER RAFTERS

Refer to SE design for roof structural construction

U value 0.15W/m2K for rafters at 400mm centres

3MM plaster skim, 18mm plasterboard, 25mm battens,50mm kooltherm k107, 100mm kooltherm k107, 50mm ventilated cavity, 18mm plywood decking separating layer lead sheet.

Code 5 lead to be installed to lead sheet workers association details.

minimum crown pitch to be 2 degrees and 34 degrees to the pitch. Lead standing seam roof with edge trims and details on separation layer, on 18mm marine plywood on 50 x 50mm battens on low resistance vapour barrier on 150mm rafters with 150mm of insulation between on 32.5 kingspan insulation with 25mm x 38mm battens with 18 mm plasterboard 3mm skin coat.

lead to wrapped around eaves board with Soffit painted to match with wetherproof paint. Soffit board along rear elevation to be provided with downlights at 600mm centres eq to bi-fold screen.

25mm minimum air vent to be provided behind gutter interface to existing wall air vent to provide cross air flow to roof .

FIRE SEPARATION

Joints between or openings in any fire separating elements should be fire stopped with intumescent seals or other proprietary firestopping / sealing system to 60/30mins fire resistance

Ducts to be boarded out to provide 60/30mins fire integrity, using British Gypsum fireline board or equal, all joints taped & sealed to maintain integrity

Roof spaces over compartment walls to be fire resisting along the line of the wall to match the wall. Cavity barriers to be fitted over.

SKIRTING BOARDS & ARCHITRAVES

All skirting boards & new architraves to be painted softwood size and moulding to match existing

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GUTTERS, DOWNPIPES

Black sand cast iron half round gutters and downpipes in positions shown to closely match existing.

VENTILATION

All rooms to be naturally ventilated by opening windows/doors. Opening lights to windows serving habitable rooms to be equal to 1/20th of the room floor area as rapid ventilation

Equivalent background ventilators to be in accordance with Table 5.2B in Part F of the Building Regulations with mechanical ventilation for single aspect flats where required under Building regs to m&e design

Kitchen extract fan to be set at 30 litres/sec, incorporated into a cooker hood
Bathroom extract fans to be set at 15 litres/sec for intermittent operation
WC extract fan to be set at 6 litres/sec for intermittent operation

Extract fans to be ducted to vent tile or through external wall as shown

Every new casement (i.e. NOT just every new window) to have a prop trickle vent fitted, with each ventilator giving a minimum of 4000mm2. Trickle vents to be concealed under window head & therefore not be visible externally, vents to be adjustable & colour matched to windows internally

The length of any flexible ducting for axial extract fans is to be kept minimal and not to exceed 1.5m in length. The max length of flexible ducting to centrifugal fans (for extract rates 6 to 30 litres/second) is 6m. For centrifugal fans with extract rates of 31 to 60 litres/second, the maximum length is 3m. For fans rated to 30 litres/second is limited to two bends in the extract ductwork and reduced to one for higher extract rates. Flexible ducting is to be kept taut

EXTERNAL WORKS

Construct external patio areas, garden walls and retaining walls as indicated on drawings. All retaining walls exceeding 600mm high to be designed by structural engineer

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SERVICES - GENERAL NOTES

Exposed electrical conduits are not acceptable

Installation & commissioning certificates must be issued to Building Control in respect of the heating and electrical installations, which must be installed by suitably qualified persons

ABOVE GROUND DRAINAGE

Provide 110mm dia. Upvc soil & vent pipes and stub stacks in positions shown, all with long radius bend at base. Vent pipes to terminate at proprietory ridge/tile vents, as appropriate. Stub stacks to terminate 750mm above floor level with screwed access cap

Washbasins to have min. 32mm diameter wastes for branch lengths up to 1.7m, 40mm diameter wastes for branch lengths up to 3m. Sinks to have min 40mm diameter wastes for branch lengths up to 3m and 50mm diameter wastes for branch lengths up to 4m. All appliances to have 75mm deep seal traps (50mm for wc's)

Connections to svp which are directly opposite each other to be vertically offset by min. 110mm

SVPs to be located in plasterboard & sw framed ducts, wrapped in mineral fibre insulation

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LIGHTING

100% of fixed lighting to have energy efficient lamps. External lighting to have light sensor controls & timers & where appropriate movement sensors

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POSITIONING OF SERVICE CONTROLS ETC

Switches, sockets, TV/telephone points, Consumer Units*, heating thermostats & controls, thermostatic rad valves and mains water stop taps to be located between 450mm and 1200mm above finished floor level, exact heights to be agreed on site and 300mm away from an internal room corner

* Located to avoid hazard to young children

Provide & install a domestic fire alarm system to BS 5839 Part 6, including the following as shown on the general arrangement drawings

SMOKE DETECTORS S

Mains operated smoke detectors & sounders, interconnected with battery backup. Positioned within 7.0m of living room/kitchen doors and 3.0m of bedroom doors and min 300mm from any light fitting

CARBON MONOXIDE DETECTORS Co

Mains operated Carbon Monoxide detectors & sounders, interconnected with battery backup

HEAT DETECTORS H

Mains operated heat detectors & sounders in kitchen

HEATING

Extend existing gas fired water filled central heating system with wall mounted radiators to new areas except kitchen where new floor is to have underfloor heating and new kitchen island unit is to have electric plinth heaters

Pipework to be concealed within voids. Pipe drops only allowed within svp ducts or cupboards. No pipe drops allowed within habitable rooms

Contractor is to provide full specification for approval by Building Control. Installation & commissioning certificates must be issued to Building Control & the heating system must be installed by a suitably qualified person

Space Heating Controls for new areas shall comply with Domestic Heating Compliance Guide 2006. The building is to be provided with zone, timing & temperature controls such that each area is maintained at the required temperature only during the period for which it is occupied. Additional controls may be provided to allow heating during extended unusual occupation hours and to provide for sufficient heating to prevent condensation or frost damage when the heating system would otherwise be switched off

For buildings with a max. output not exceeding 100kw to follow guidance in GPG 1132 otherwise follow guidance of CIBSE Guide H

Insulate all pipes ducts and vessels to the standards required in BS5422

WATER FITTINGS

Taps for sinks in kitchen to be fitted with flow restrictors in order to enable water use to be adjusted

Provide water supply externally for hose tap, with internal stop valve, locations to be agreed on site. Relocate any existing services as necessary

NEW KITCHEN

Provide cost for supply and fit kitchen specification to be confirmed by client including all new whitegoods as required.

PANTRY

Demolish existing pantry wall and refer to structural support details. Make good all areas and fully decorate.

Relocate existing radiator.

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NOTES
Do not scale

Verify all dimensions on site before commencing any work or preparing any shop drawings

All building materials, components and workmanship to comply with the appropriate Public Health Acts, Building Regulations, British & European Standards and Codes of Practice and to the appropriate manufacturers recommendations.

For all specialist work see relevant drawings

All schemes to be set out completely including buildings, roads, drainage and levels prior to the commencement of works

Sites to be checked against Land Registry plans and any necessary Easements to be established

Any discrepancies, errors or omissions to be reported to the architect for further instructions before commencement of works

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A		
Date	Revisions	By

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Drawing Title
CONSTRUCTION NOTES

Scale	Date	Drawn By
1:50	12/11/24	LDM

Project No.	Dwg. No.	Rev.
5424	WD-13	