

TRENCH FOUNDATION - Provide 750mm thick trench fill concrete foundations with a minimum width equal to the width of the wall plus 300mm. Concrete mix to conform to code of practice for foundations. All foundations to be minimum 1.00m below ground level, depth and size of foundation to be approved on site by Building Control to suit site conditions. All constructed in accordance with Building Regulations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min. 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found, or any major tree roots in excavations, Building Control to be contacted and the advice of the Principal Designer should be sought.

SOLID FLOOR (P/A 1.0) - Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over a 1200-gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with min. 100mm Celotex GA4000 insulation. 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed. Finish with 65mm sand/cement finishing screed with light mesh reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide and min 50mm concrete cover over length of drain. Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia. UPVC pipes with 100mm concrete cover laid under the extension. Pipes to terminate at new 65mm x 215mm air bricks with cavity tray over. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

DRAINAGE - All drainage to 'BS EN752' plus approved doc H 100mm diam. UPVC drain ware minimum fall 1:40 in 150mm concrete surround new or existing inspection chamber on the existing run. The public sewer being accurately located by the applicant on site prior to commencement of foundation excavations in order that the effect of the proposed works can be determined. Where a public sewer is to be built over, the condition of the public sewer being camera surveyed or fully exposed and determined as satisfactory. Failing this the affected length of pipework being replace with new. All foundations within min. 3.0m of the public sewer being taken down to below invert level of the public sewer. No structures running parallel to the line of the public sewer being located within 500mm of the public sewer. Crossings being adequately supported using pre-cast or appropriately designed in-situ concrete lintels or beams flexible packing surround.

IN SOME CIRCUMSTANCES IT MAY BE NECESSARY TO APPLY TO THE MANAGING WATER COMPANY FOR A 'BUILD OVER AGREEMENT' PRIOR TO THE WORKS BEING CARRIED OUT. ADVICE CAN BE SOUGHT FROM THORNS YOUNG OR YOUR LOCAL BUILDING INSPECTOR.

MECHANICAL EXTRACT - Provide mechanical extract ventilation to WC/bathroom/shower room ducted to external air capable of extracting at a rate of not less than 15 l/sec. Vent to be connected to light switch and to have 15 minutes over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

MECHANICAL EXTRACT (KITCHEN) - Kitchen to have mechanical ventilation with an extract rating of 60 l/sec or 30 l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooler hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body. If applicable utility room provide mechanical ventilation ducted to external air capable of extracting at a rate of 30 l/sec.

ELECTRICAL WORKS - All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self-certification scheme such as BRE Certification Ltd, BS, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to the Council.

INTERNAL LIGHTING - Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. All fixed to have lighting capacity (lm) 185 x total floor area, to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide. Any recessed ceiling lights to be 30-minute fire resisting.

HEATING - Extend all heating and hot water services from existing and provide new TRVs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities by laws, Gas safety requirements and IEEE regulations.

INNER PARTITIONS - 100mm x 50mm timbers studs at 400mm cts. with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/4 height or 450mm cts. Provide min. 10kg/m² density acoustic soundproof quilt tightly packed (e.g. 100mm Rockwool) or 'Isowool' mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm plasterboard with 3mm skim plaster finish. Taped and jointed complete with beads and stops.

SOLID GARAGE FLOOR - To consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide 150mm RC28/35 or ST5 ground bearing slab thickened 300mm at garage entrance. 1 layer of 252 steel mesh to be provided within the slab. Slab to be laid over a 1200 gauge polythene DPM as required. DPM to be lapped in with DPC in walls. Ensure a 1:80 fall is provided to the floor from back of garage to front garage door.

STUB STACK - Run to 100mm dia. stub stack terminating above appliance flood level with 'Durgo auto-vent'.

PLUMBING - All to BS EN 2056 plus approved doc H 38mm dia. wastes from shower and sink. 32mm dia. Waste from wash hand basin, all with rodding access on changes of direction and with deep seal traps. Run to stub stack.

0 1 2 3 4 5 scale 1:50 m.
0 2 4 6 8 10 scale 1:100 m.

section a-a

section b-b

section c-c

STEELWORK AND TIMBERS - Supply and install new structural elements, including beams, roof and floor structures, bearings, and padstones, in accordance with the attached structural calculations and details. New steel beams to be fire protected either by encasement with the Gyproc FireCase system (or other approved system) or by application of Kullifire S707-60 (or other approved intumescent coating), to provide 30 minutes of fire resistance. All fire protection measures to be installed strictly following the manufacturer's specifications and guidance.

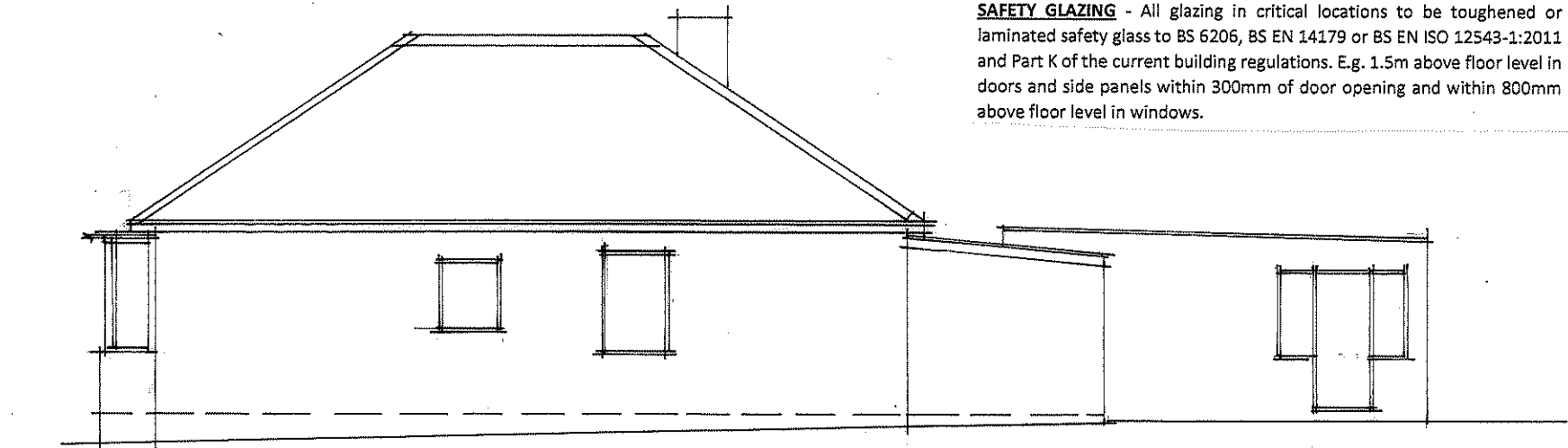
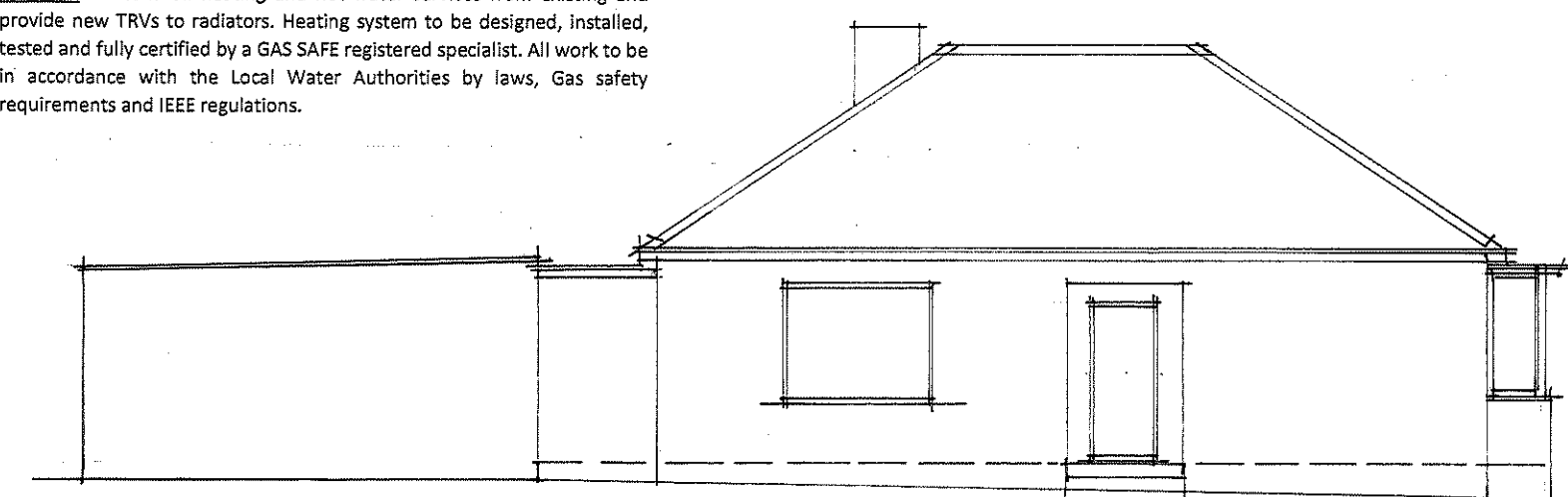
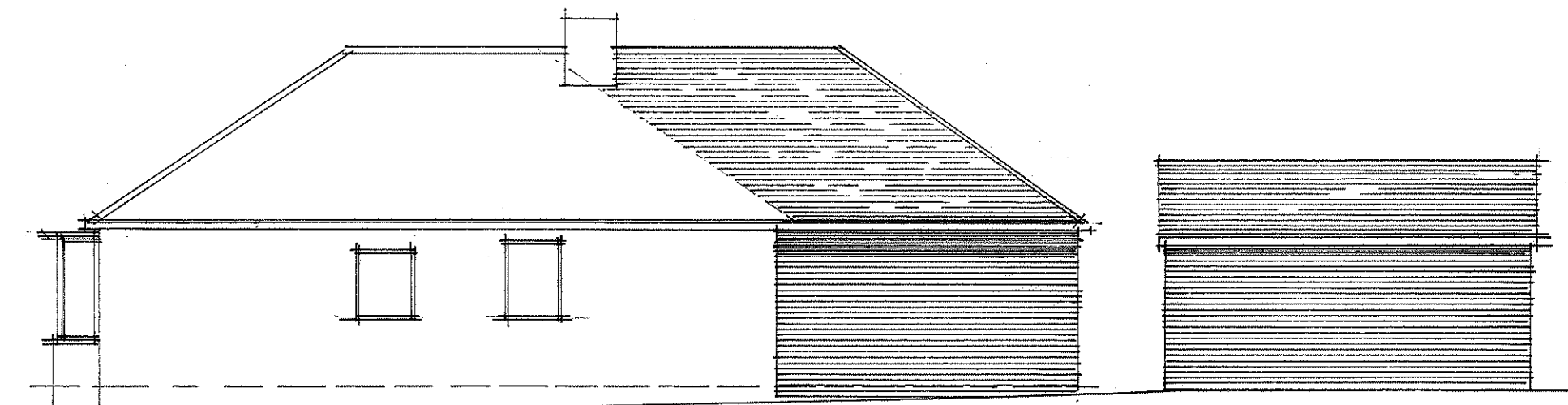
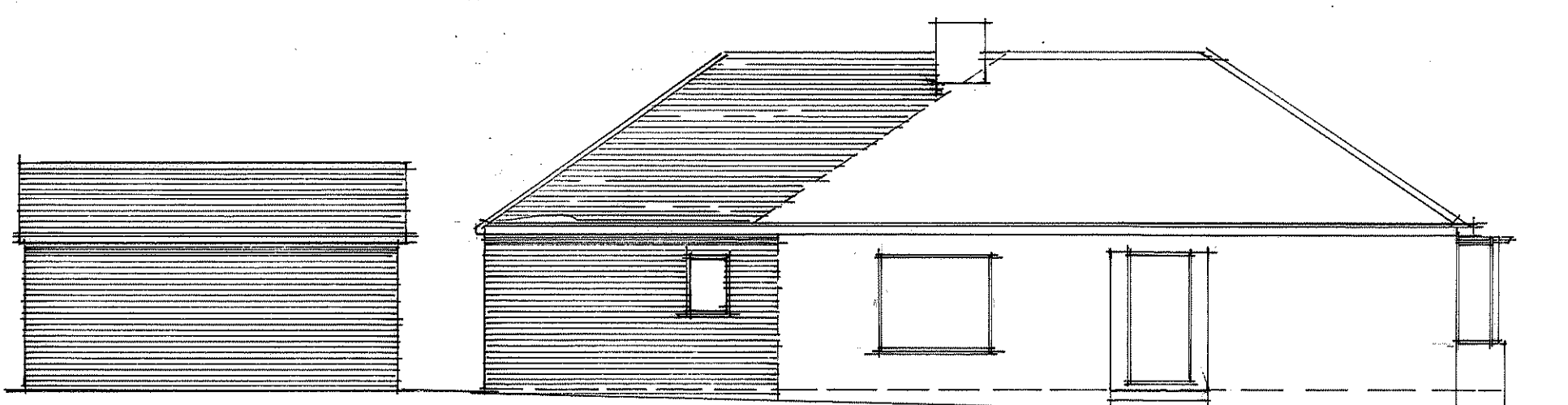
LENGTHS OF STEELS TO BE SITE MEASURED TO INCLUDE BEARINGS. FABRICATION DETAILS TO BE PROVIDED IF REQUIRED BY BUILDING CONTROL.

NEW AND REPLACEMENT DOORS/WINDOWS - Glazed areas to be double glazed with 16-20mm argon gap and soft-low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K of the current Building Regulations. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape. Windows to be fitted with trickle vents to provide min 8000mm² background ventilation in accordance with Approved Document F. Local authority may insist on a SAP calculation to prove areas with large amount of glazing. This will involve extra fee if required. TO ACHIEVE A U-VALUE OF 1.4W/m²K.

SAFETY GLAZING - All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K of the current building regulations. E.g. 1.5m above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

existing sides

proposed sides



CAVITY BRICKWORK WALL - New cavity wall to comprise of 102mm suitable facing brickwork. Full fill the cavity with 90mm Celotex Thermocore Cavity Wall 21 full fill insulation as manufacturer's details, leaving 10mm cavity between the insulation and outer skin. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. 'Celcon solar' or 'Thermalite turbo'. Internal finish to be 12.5mm plasterboard on dabs with 3mm skim plaster finish. Walls to be built with 1:1.5 cement mortar. Vertical joints in the board must be staggered and all joints tightly butted. All details including corner and junction to be as relevant BBA certificate. Location to be assessed for suitability of insulation boards. All new walls below ground to be constructed using blockwork compliant with BS EN 771 and suitable for below ground level or semi engineering brickwork. Walls to be built using 1:4 masonry mortar mix or equal approved specification to BS EN 12956-1-1. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

PITCHED ROOF (INSULATION AT RAFTER LEVEL) - Roofing tiles to match existing on 25 x 38mm tanalised treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 125mm x 50mm 224 rafters at max. 400mm centres. Rafters supported on 100 x 50mm treated wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 100mm Celotex GA4000 between rafters and 50mm GA4000 under. Fix 12.5mm plasterboard (joints staggered) over VCL Finish with 3mm skim coat of finishing plaster to the underside of all ceilings. Provide cavity tray where roof meets existing wall. Ceiling joists tied to rafters. 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 1 timbers with noggins. All straps to be 1200 x 30 x 5mm galvanized straps at 2m centres. TO ACHIEVE A U-VALUE OF 0.15W/m²K.

PITCHED ROOF VENTILATION - Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation.

PIPES PASSING THROUGH TRENCH FOUNDATIONS - The load-bearing capability of foundations must not be affected where services pass through. The pipe work should be sleeved and be provided with 'rocker pipes' at 150mm either side of the foundation concrete. The 'rocker pipes' should have flexible joints and be a max. length of 600mm. Alternatively, Pipework should pass through a suitably strengthened opening in the foundation, i.e. foundation shuttered and a provided with suitable lintel over the pipe allowing for sufficient space for movement to ensure that the drain is capable of maintaining line and gradient. Opening should be masked with granular backfill (pea shingle) around pipe. DPC to be provided as required by BCO. Advice from Building Control to be sought on suitability of pipe running through foundation before construction.

PIPES PASSING THROUGH WALLS - Walls above pipes passing through substructure walls to be supported on suitable lintel on semi-engineering bricks. Pipe to be provided with a 50mm clearance all round, opening to be masked with granular backfill (pea shingle) around pipe. DPC to be provided as required by BCO. Alternatively, where new pipework passes through external walls the pipe work is to be provided with 'rocker pipes' at 150mm either side of the wall face. The 'rocker pipes' must have flexible joints and be a max. length of 600mm.

INSPECTION CHAMBER - Sizes to suit invert of drains min. sizes 600mm x 450mm internal with 102mm semi-engineering brickwork sides 215mm where invert exceeds 1m, built up from 150mm concrete slab base and fitted medium duty cover and frame. New and existing drains where passing beneath building encased in 150mm minimum of concrete.

UNDERGROUND DRAINAGE - Foul drainage to consist of 100mm diameter UPVC proprietary pipework to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (300mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1.

ABOVE GROUND DRAINAGE - All new above ground drainage and plumbing to comply with BS EN 12056-2 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti-vac bottle traps and rodding eyes to be provided at changes of direction. Size of wastes pipes and max length of branch connections, wash basin 32mm diameter, bath/shower 40mm diameter, WVC 100mm diameter. All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12230, placed at a height so that the outlet is above the trap of the highest fitting. Waste pipes not to connect on to SVP within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

STEEL LINTELS - Lintels shall be galvanised steel, powder-coated (e.g. Catnic) and include a built-in damp-proof course (DPC). Each lintel shall be wide enough to provide adequate support for the walling above and installed with a minimum 150mm bearing at each end, fully bedded on a solid mortar bed (lintels must not rest on partial bricks). Condensation risks at potential cold bridges should be minimised by ensuring wall insulation abuts the window frame head and insulation is provided under the lintel unless the manufacturer specifies an alternative. Unless solely supporting a roof, lintels shall be fire-protected to provide 30 minutes fire resistance. All fire protection must be installed strictly according to the specialist manufacturer's guidance.

WALL TIES - All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845-1:2013. Wall ties for cavities over 150mm to be suitable for cavity width, and installed as manufacturer's details.

RAINWATER GOODS (SOAKAWAY) - New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia. UPVC downpipes. Rainwater taken to new soakaway, situated a min. distance of 5.0m away from any building, via 110mm dia. UPVC pipes surrounded in 150mm granular fill.

SOAKAWAY CRATES - Trench of soakaway to be provided slightly larger than designed depth after porosity test (if required), but a minimum of just

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Principal Contractor is to ensure all materials and workmanship complies with Regulation 7 of the Building Regulations whether or not specifically stated on these drawings. It is the Principal Contractor's duty to ensure all works on site are approved by an appointed Building Control body.

Principal Contractor is to ensure all dimensions are taken on site before procurement of any materials/work proceeding. Structural members are not to be ordered scaling from this drawing.

Building structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked by Principal Contractor before commencing the works for adequacy prior to commencement of work and as required by the Building Control Officer. Any discrepancies please contact Thorns Young.

Principal Contractor to ensure full compliance with the amended CDM Regulations (2015) if the project requires.

This drawing, unless noted, does not represent compliance with the Party Wall Act 1996 and if required, all agreements are to be in place before works commence.

It is the Principal Contractor's responsibility to ensure Planning/Building Control approvals are in place prior to works commencing. Should works commence prior to relevant approvals Thorns Young Architectural accept no responsibility.

Do not scale from this drawing except for the purpose of Local Authority Planning department.

A	Date	Revision
1	10/10/2026	1

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9 THE CREST
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Drawing Title

PROPOSED REAR
EXTENSION AND
REPLACEMENT GARAGE

Scale 1:50 + 1:100

Date MAY 2026

Drawn by CRC

Org. No.

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Rev.

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