



Carefully take down existing rear section of garage and prepare site for new building works.

Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from GL to DPC level externally and concrete block work internally. Walls built off 700  $\times$  200 (C20 mix-20N/mm2) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm end bearing onto adjacent brickwork.

External walls with no cavity insulation. 102mm block/white matching render finish external leaf, 50mm cavity and 100mm Thermalite Sheild blockwork internal leaf. Cavity walls to be finished internally with 62.5mm thick Kingspan 'Kooltherm' K118 insulated plasterboard dabbed to walls, finished with 3mm plaster skim to give 'U' Value of 0.25.

Horizontal dpcs to be provided to wall min 150mm above finished ground level (stepped where necessary). A minimum of 4 courses of engineering brick is to be provided below dpc level to prevent spalling

D.P.M's to lap both new and existing dpc's

Building Control Officer.

Existing foundations Expose the existing foundations for local authority inspection to ascertain their suitability to sustain additional loading

Existing Structure The existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy to support new imposed 'dead' and 'live' loading conditions prior to commencement of work and as required by the Local Authority

To be continuous with existing closed at eaves with Superlux

Weak concrete mix. Fill in cavity to be 225 mm below DPC level

Forming new opening Cut down existing brick wall to form new opening. Insert new lintel. Make good floor, wall and ceiling where necessary

Cavity closer Insert Isofoam XCC insulated cavity closer to all new openings all as

document | 2013. Width and fixing to suit opening

New opening adjacent kitchen Break open existing walls at ground floor level from floor to ceiling to form new opening as shown and provide and insert R.S.J.'s as indicated on plan, over supported both ends concrete padstones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations. Upon exposing brickwork if any discrepancies appear regarding steelwork notify architect for reassessment. Note any changes or costs incurred are solely the responsibility of the client. Assumptions on existing construction have been made with the limited information obtained during survey.

Any drains new or existing that pass through external walls, insert concrete lintels over (allow 50mm clearance between drain and

underside of lintels) Drains that run under a building to have min 100mm of granular or other flexible filling provided round the pipe if depth of drain below the surface exceeds 600mm. Where pipes have less than 600mm cover the pipes should, where necessary, be protected from damage by a reinforced concrete cover slab with a flexible filler and min 75mm granular material between the top of the pipe and the underside

of the flexible filler below the slab. On sites where excessive subsidence is present additional flexible joints to be provided or other solutions such as suspended drainage where the pipe is adjacent to structures or where soil conditions change in the course of the pipe run. Where the crown of the pipe is within 300mm of the underside of the slab, special protection is to be provided in accordance with Part H of Building Regulations

Below ground drainage to be approved 100mm plastic or clay drainage system laid at minimum 1 in 40 falls - bedded and installed in accordance with manufacturer's recommendations Proprietary inspection chambers to be provided as indicated and as necessary to provide rodding access to drainage runs. Sizes to suit

depth - as recommended by manufacturer All gullies to be back inlet and roddable - wastes to discharge below grating but above water line

Form new bedroom. Remove wall between kitchen and dining area,

insert new steel, later combi door and frame to allow installation of

new en-suite, provide new studded wall plasterboard both sides, insert

100 mm quilt insulation, make good all surfaces and fix matching

Existing manhole Connect new drainage system into existing manhole. Bench up in New opening wall for patio doors

Break open existing rear wall at ground floor level from floor to ceiling to form new opening as shown and provide and insert new catnic or similar approved lintel over supported both ends on 270  $\times$  150  $\times$  150 mm deep concrete pad-stones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations

Steel Beams and Brick Piers The design has required the use of a number of steel beams and brick

piers as designed by a Structural Engineer. The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction

Ground Floor Construction

Levelling screed finish on 150mm concrete slab bed on a separating layer of building paper to BS 1521:1972 on 80mm thick Kingspan 'Kooltherm' K3 floorboard insulation on Visqueen 1200 d.p.m. on 20mm sand blinding on min. 150mm well consolidated hardcore. Provide 25mm 'Kooltherm' insulation to external perimeter edges of slab. Visqueen d.p.m. to be turned up around perimeter edges of slab

and tucked in under horizontal dpc of inner leaf.

<u>Ground Floors.</u>

Ground Floor to comprise of 50 mm sand cement screed with fibre reinforcement included, over 500 gauge polythene vapour control layer, over 150 mm Kingspan Kooltherm K3 phenolic board (thermal conductivity 0.020W/mk) or similar approved, to provide maximum U value 0.22W/m2K based on a (P/A of 0.3), on polythene separating layer, on clean well consolidated sand fill to make up the level from existing concrete garage slab on 1200 gauge DPM, lapped minimum 100 mm with all

To be 3 layers of felt top layer 350 ht finish. 10 mm limestone chippings bottom based on 19 mm exterior grade plywood decking with sw firings to give fall of 1:60. Provide  $200 \times 75$  mm sw flat roof joists at max 400 mm centres, trim out with double joists around any roof openings. Under draw ceiling with plaster board and skim finish. Alternative covering fiberglass covering or rubberized covering. Full details and costs to be provided to client for final decision.

Insulation to flat roof

Provide 150mm thick Kingspan Kooltherm K7 insulation between roof joists leaving min. 50mm air gap between top of insulation and top of joists. Provide 32.5mm Kingspan Kooltherm K18 insulated plasterboard ceilings with skim finish to underside of flat roof joists to give a 'U'

Provide cross flow via eaves ventilators fixed between the rafters to vent roof space to BS 5250. Continuous 25 mm gap.

Strap down new roof and ceiling with  $1000 \times 5 \times 38$  mm mild steel straps at 2 centres fixed across two rafters/joists with 3.35x50 wire

Strap down all roof timbers i.e. Wall plate rafters ceiling joists etc with galvanized mild steel gang nail straps at max 2m centres and at first floor level across first two joists giving lateral restraint to walls

120 x20 mm half round skirting primed and painted three coats (1 gloss) to new extension

Windows and Doors.

New window and doors to be white PVCu and bifold doors to be powder coated aluminium, all with minimum 16 mm air gap with argon filled double glazing with pilkington K Glass S soft coated inner pane to achieve maximum "U" value of 1.54W/m2K to windows and doors and 1.77W/m2K to bifolds with fully draught stripped open able light equivalent to minimum 1/20 floor area for purge ventilation and including minimum 5000 mm 2 trickle vents per habitable rooms and 2500 mm 2 for non habitable rooms (kitchen, bathroom, en-suite) for background ventilation in accordance with Part F 2010 Edition System1 Table 5.2a and based on 277m2 floor area-total equivalent ventilator area 194000m2.

Frames to be lapped minimum 30 mm across cavity closer in accordance with Part L1A section 5.9 and Accredited Construction details under section 5.12 to limit thermal bridging. Details to be inspected on site in accordance with checklist to maintain quality assurance. Any glazing within 800 mm of floor level, and within 1500 mm of floor level where within 300 mm from a door and all glazing to bifold doors to

800 door set comprising 1981x726x44 solid core flush doors painted three coats , set in softwood frame 13 mm rebated and with ex. 50x25 sw architraves. Doors fitted with 1.5 pairs 100 mm bolts and 1

set lever handles. Style and type of paneled door to client's choice.

be safety glass to comply withBS6206.

Encase new RSJ with 2 layers of 12.5 mm plasterboard and skim with

staggered joints to give 1-hour fire protection.

Mechanical ventilation to WC/bathroom/en-suites by Xpelair DX100 wall mounted extractor or DX100 ceiling mounted extractor. Extractors capable of min 15 L/S extraction and to incorporate minimum 15 min over run timer. Similarly mechanical ventilation to Utility by Xpelair SL150 wall mounted extractor (min 30 L/S). Mechanical ventilation incorporating in the cooker hood in the kitchen (min 30 L/S) ducted to external wall.

Extend new roof covering min 300 mm under tiles to give adequate weather protection. Use no.4 lead in valley over felt 300 mm either side. Form saddle in lead

100 mm diameter upvc with airtight rodding access above floor level and sealed into Hepworth 'Hepseal' drain connector at floor level. Stack taken up and terminated 450 mm above springing level with pvc bird cage (900 mm above any opening lights)

New En-Suite

Provide mechanical extract ventilation to give min extract rate of not less than 15 litres per second which can be run intermittently but has a 15 minute over-run. Extract fan to be ducted to external air via 100mm dia flexible duct to terminate on outside wall at fitted grille. Extract fans to be positioned less than 400mm below ceiling. Ducts to be connected appropriate extract and discharge grilles (min 85% of the duct free area) with back draught device fitted to prevent

New 50mm shower, 40mm sink and 100mm wc waste to be provided to new en-suite and bathroom and connected to new soil and vent pipe. Anti-vac deep seal traps to be fitted to internal pipes. No opposed waste connections to be made within 200mm of W.C. connection with

All non-loading partitions to comprise of 75x50 mm softwood studs@ 450 mm centres, and 75 mm softwood noggins @900 mm centres, with continuous header and sole plates, and with 15 mm Gyproc Wallboard (minimum mass per unit area 10Kg/m2) and 15 mm Gyproc moisture resistant board to bathroom, en=suite and WC, joints sealed complete with skim finish to both sides. All stud partitions to have 60 mm thick Rockwool Flexi insulation quilt between studs (minimum density

<u>Gutters and fascia</u>

100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

Extend all heating and hot water services from existing and provide new thermostatic valves to radiators. Heating system is to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authority by laws, gas safety requirements and IEE Regulations.

Provide and fit thermostatic control valves to radiators.

All new timber to be tanalized and stress graded 4 BS:4471 Part 1 (1978) Dimensions for softwood BS:5268: Part 5 Preservatives Treatment for Structural Timber

100 mm drains min fall 1:40 all to comply with BS en 295

The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

Inspection chamber Provide 600 mm diameter polypropylene inspection chamber positioned

over new drain at change in direction. Cut down height of chamber to suit ground level and finish with cast iron cover

These drawings are for the purpose of obtaining Building Regulations and Planning permission only.

All work thereafter is undertaken solely at the clients/contractors discretion and liability is therefore transferred. With regards to any matters relating to Planning or Building Regulation, they are solely at the discretion of the client, no information or advice given prior to or after the drawings are completed are for information only and not binding. All work must be carried out in accordance with the relevant building regulations and codes of practice. Do not scale from drawing. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately. Services i.e. Electric, heating, plumbing etc. Are not included in these

Smoke alarms and heat detectors. Fire Safety Approved Doc B

Where new habitable rooms are provided above ground level, a fire detection system shall be installed. Provide a mains linked smoke alarm in the circulation space on all levels in accordance with Paragraph 1.10 tO 1.18. Also provide 1 no smoke detector to ground floor. There will be a compatible interlinked heat detector or heat alarm in the kitchen, in addition to whatever smoke alarms are needed in the circulation space.

Sanitary fittings to new en-suite

W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap and 100 mm diameter upvc soil branch pipe to new 100 mm diameter upvc s & vp. Lavatory basin to have 75 mm deep seal anti-vac trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to s & vp. Shower to have 75 mm deep seal anti vac trap and 42 mm diameter upvc waste to run between floor joists connected to new s & vp. Connect all fittings to new hot and cold Background ventilation

Condition Notes

Local Authority.

All new habitable rooms to have background ventilation not less than 8000 sq mm kitchen and en-suites to have 4000 sq mm. Insert permanent trickle vents to heads of all windows to rooms affected. Al to regulation F1 2010

1. The drawings relating to the proposed project are for the purpose

All work thereafter is undertaken solely at the Clients/ Contractors

2. In order to prepare these drawings, certain assumptions have been made which have to be verified both before and during the course of

the works. Should at any time the existing construction be exposed which does not agree with these drawings or dimensions vary, then the engineer should be informed immediately and suitable actions taken. 3. All work must be carried out in accordance with the relevant

4. Do not scale from drawings. Work only from figured dimensions. All dimensions to be checked on site and any discrepancies to be notified

5. The drawings relating to the proposed project must be read in conjunction with and checked against any structural engineer's or

6. The Contractor is to notify Building Control at the appropriate stages of construction - necessary for them to determine the works

7. Before work commences - ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the

Mechanical ventilation to Kitchen to give 3 air changes per hour connected to light switch into 150 mm upvc pipe to outside with cowl

of obtaining Planning and Building Regulations approval only.

discretion and liability is therefore transferred.

building regulations and codes of practice.

to the relevant bodies immediately.

specialist drawings and details provided.

fixed all to regulation F1 2010 60 litres/second

Provide 75% of new primary light fitting units to new extension to be of type, which will only take high efficiency lamps Provide min one third of primary lights to have a luminous efficiency greater than 40 lumes per circuit watt. The amount/type of light fittings and electrical wall sockets

Electrical Contractor (Competent Person)

All the wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS 7671, the IEE 18<sup>th</sup> edition wiring guidance and Building Regulations Part P (electrical safety) by a competent person registered with an electrical self certification body authorised by the Secretary of

is to be agreed with the owner before work commences on site.

The competent person is to send to the approved inspector a 'self certification certificate' within 30 days of the completion of the electrical works. The Client is to be provided with a copy of the 'self certification certificate' and a BS 7671 electrical installation test certificate.

Electrical Fittings.

All sockets to be positioned above 450 mm from floor level, and all switched to be positioned below 1200 mm from finished floor level to comply with Part M of the Building Regulations. Minimum 3 out of every 4 internal light fittings and all external lights to incorporate only fittings with LED lamps-luminous efficiency greater than 45 lamp lumens/circuitwatt and total output greater than 40 lamp lumens, with and external lights to incorporate daylight sensor, all in accordance with Part L1B section 4.24 Building Regulations (2010 Edition with 2013 amendments) and Table 42 of Domestic Building Service Compliance Guide 2013

Electrical installation to be designed and installed and tested on completion by an NICEIC registered contractor in accordance with BS 7671:2001 to comply with Part P of Building Regulations.

> PROPOSED SINGLE STOREY REAR EXTENSION, INTERNAL ALTERATIONS, GARAGE CONVERSION INCLUDING NEW WINDOW. 38, THE HAZELS, WILPSHIRE, BB1 9HZ.



PROPOSED SINGLE STOREY REAR EXTENSION, INTERNAL ALTERATIONS, GARAGE CONVERSION INCLUDING NEW WINDOW. DRAWING TITLE PROPOSED LAYOUT SECTION AND LOCATIN PLAN. <u>CLIENT</u> MR. & MRS COLLEY. 38, THE HAZELS, WILPSHIRE, BB1 9HZ. SCALE 1:50@A1 DEC 2020. SCALE 1:1250@A1.

DRAWING No RC 12205635/2.