

Construction Notes

General Notes:-

All Work to be carried out in strict accordance with the current Building Regulations (Approved Documents) and all relevant Codes of Practice and to the full satisfaction of the Local Authority Building Inspector and associated Engineers

All existing elements are assumed only and should be checked on site prior to commencement of Work. All dimensions are in metric plus should be checked on site prior to ordering materials. All materials to be used in accordance with manufacturer's instructions

The Plans for the scheme have been prepared for Building Regulations and Town and Country Planning purposes

Preparations, Protection, Access and Demolition:-

Provide all necessary scaffolding, access ladders, material hoists, temporary protection and working platforms etc for the scheme which are to be erected

Temporary protection to the building to maintain weather tightness until completion of the works. Any breakouts or alterations in existing walls or roof to be made using props/pins as necessary to maintain structural integrity of the remaining structure whilst works are being carried out. Any structural members/walls etc should only be repaired/replaced/supported or removed in strict compliance with details and calculations received from a qualified Structural Engineer. If required by the Building Inspector details must be submitted and approved by Building Control before those specific works commence on site

All removed rubble, bricks, concrete, timber etc to be carted away from site in preparation for proposed extension. Garden levels in vicinity of proposed extension to be altered accordingly to suit new finished floor levels as required

Where any suspected asbestos is found, work should cease immediately in that vicinity and advice from specialist asbestos removal firm must be sought. Should any contamination need to be removed, specialist to be commissioned by Client to ensure safe removal and disposal. Disposal receipt to be retained and handed to Local Authority as required by Law

Foundations:-

Reduce levels of the site as required, removing all made ground, including strip out of vegetation layers of soil ready for foundations dig. Take note of requirements for ducting of Electricity, Gas, Water, Telecommunications and drainage. Liaise fully with the Utility companies as necessary with regard to their requirements

External wall foundations to be 600mm wide x 225mm thick concrete class C25 strip foundations taken down to a suitable load bearing subsoil minimum 750mm deep. Generally allow minimum 150mm projection of foundations from face of walling. All foundations to be taken down below level of existing drains found to be in use on the Site and laid to take into account existing tree roots. Trench fill foundations may be used in lieu of strip foundations should this be preferred method. Particular care to be taken to avoid damage to existing drains

NB. No below ground site investigations have taken place. Attention is drawn to existing drainage where walls are to be built over. Ground conditions are assumed to be firm clay, however, in all cases; foundations are to be laid to the satisfaction of the Local Authority Building Control Officer who may change the design where he deems fit following site inspection of the excavations. Should other methods of foundation construction be required (eg. Reinforced raft foundation) Client to seek advice of Civil/Structural Engineer. All foundations to be laid in accordance with BS 8004 : 1986 (Code of Practice for Foundations)

Footing Walls (strip foundations):-

Celcon/Stocks or similar approved dense blockwork (7N/mm²) walled directly off foundation strip up to 150mm below finished external ground level. Blockwork to be suitable for use below ground in accordance with BS 2028 :1364

Demolition:-

Existing ground floor rear porch extension to be demolished in a safe manner and removed from site

Damp Proof Course Cavity Walls:-

Bituminous damp proof course to be provided to both skins of cavity wall minimum 150mm above finished external ground level

External Walls:-

External leaf 100mm thick Marshalls Cromwell pitch face weathered walling size: 440mm L x 140mm H to match existing building. 10mm wide clear cavity and 90mm thick Thermaclass cavity wall 21 insulation slabs fixed to internal skin (taken below floor insulation) or similar approved. Self adhesive breathable tape at all joints and at wall tie locations. 100mm thick Plasmor fibolite solid loadbearing blockwork minimum 7N/mm². Internal finish to be 12.5mm plasterboard on dabs skimmed and painted. U-value to be 0.18 W/m²K. Wall ties to be in accordance with BS1253 and spaced @ 750mm centres horizontally and 450mm centres vertically and staggered. Allow for extra as required adjacent to windows all to ensure correct fit of cavity insulation slabs. Fix proposed external walls to existing using SS crocodile wall ties or with proprietary wall connector. Cut back external insulation to ensure solid bond. Make vertical saw cut in existing wall (25mm deep) for new vertical DPC. Cavity to commence at not less than 225mm below DPC, and cavity to close around all openings and at eaves. All new cavities should be continuous with the existing. Provide Rockwool Rockclose (or similar approved) insulating vertical DPC to jambs and DPC cavity tray over

Ground Floor Construction:-

50mm thick sand / cement screed laid on 100mm thick rigid foam insulation on vapour barrier on 100mm thick concrete slab onto 1200 gauge heavy duty polythene dpm lapped with dpc over 50mm thick sand blinding on 150mm thick hardcore / selected backfill. Floor to achieve a minimum 'U' Value of 0.18 W/m²K

Roof Construction:-

New grey tiles to match existing low level roofs on original building on 38mm x 25mm softwood tanalised battens on layer of Kingspan Nilvent breathing sarking membrane stopped short at ridge by 10mm and lapped over fascia angle fillet and draped into gutter over 50mm x 100mm timber rafters spaced at 400mm centres. Rafters to span onto 100mm x 75mm timber wall plate bedded in sand and cement mortar on top of inner skin of external wall and to be supported at junction

between new roof and existing wall with 75mm x 100mm timber bearer fastened to wall. Where traditional ceilings are used, fit 50mm x 100mm ceiling joists spaced @ 400mm centres. Fit plasterboard to underside, skim joints and provide skim finish. Insulate ceiling void with 100mm thick Rockwool quilt insulation between joists and 250mm thick Rockwool quilt insulation laid over joists to give minimum 'U' Value of 0.15W/m²K. Provide 30mm x 5mm mild steel lateral restraint straps at ceiling level and up slope of roof spaced @ 2000mm centres to span across 3 no. rafters with noggins between. Fit Code 4 milled lead flashing at junction between roof and wall

Top water and roof void ventilation:-

Black UPVC gutter to new roof to match existing building. Include stop ends returns and drop section with 65mm black diameter fall pipe to discharge below grate level into back inlet gulley trap. Connect to existing surface water drainage system

Eaves detail to roof White UPVC fascia and soffit cladding with continuous 10mm ventilation slot to be provided allowing cross ventilation of roof space

Windows:-

All windows to have key operated locks and be compliant with BS 7950 : 1997. White UPVC frames with opening lights as shown on drawings to give natural light and ventilation requirements ie minimum 1/20th floor area ventilation. New windows to all habitable rooms to be escape windows giving minimum 500mm wide x 800mm high opening. All window frames to accept double glazed low-E sealed units to be Pilkington's K glass minimum 'U' Value 1.4 W/m²K (or similar approved). Energy rating of window to be band B. Vertical DPC to all jambs in brickwork and DPC to cills. Cavity tray above openings. Proprietary mastic sealant between frame and wall around entire perimeter of frame, inside and outside

Safety Glazing:-

Windows in critical locations within 1500mm of ground and floor level, and 300mm of windows within 800mm of floor/ground level to be safety glazed to BS EN 12150, BS EN 14179, BS EN 14449, which supercedes BS 6206

Fire Protection:-

Already provided in existing house with smoke detectors located on ground floor and first floor staircase

Lintels:-

Fit Catnic Cougar or similar approved proprietary steel lintels with integral cavity tray and filled with insulation minimum end bearing 150mm above windows to external walls. All lintels to have flexible DPC stepping down across the cavity towards the front face. Allow for weep holes in blockwork at 400mm centres

Sealing Measures:-

All external window frames, service penetrations to walls, floors and ceilings, etc should be sealed both internally and externally with proprietary sealing products such as proprietary waterproof mastic, expanding foam or mineral wool or tape to ensure air tightness

Services:-

All work associated with Gas, Water, Electricity or Telecommunications installations to be in accordance with the relevant rules, regulations, Codes of Practice etc

Note, Gas, Electric and Water meters and services to them, will require installation by relevant Authorities. It is the Client's responsibility to arrange for and pay for any mains service connections to the building

Electrical Services:-

New or works to existing electrical circuits or systems must be designed, installed, tested and certified to comply with the current editions of BS 7671 or the IEE Regulations by a competent person. A competent electrician of a member of a competent person scheme must test and certify all such works. The electrician must provide signed copies of an electrical installation certificate confirming to BS 7671 for the owner of the property and a copy must be forwarded to the Building Control Surveyor for approval at completion so the Building Control Completion Certificate can be issued

Electrical fit out including fixtures and fittings, switches, socket outlets, alarms, audio visual installations etc including amounts and positioning of items to Client's specification and instructions

All light fittings to be energy efficient

All switches and sockets should be fixed between 450mm to 1200mm above floor level to comply with Part M of the Building Regulations 2010

Heating Services:-

To be provided by electrical space heating at low level fixed to wall. All installed by a competent electrician

Drainage System:-

Existing site drainage system is a separate system for Foul Water and Surface Water

New Surface Water drainage and connections to be Hepworth Supersleeve 100mm diameter Polypropylene including all matching fittings. Surface Water 100mm diameter pipe to be laid to a fall of 1 in 40

All pipework less than 900mm cover to be encased in 150mm concrete. This applies to all drainage passing under new extension including paths within 1m of external loadbearing walls. Movement joints to be positioned in concrete encasement at natural pipe joints. Pipes passing under non loadbearing strata ie. Gardens with less than 600mm cover should have at least 1000mm granular backfill encased with concrete slabs positioned over prior to backfill. All pipes to be bedded on 100mm granular backfill (maximum aggregate size 10mm) with 100mm selected backfill above pipe (max aggregate size 40mm) and 2 further layers of selected backfill, as above, hand rammed in layers to give a minimum 300mm above crown of pipe before normal backfill

Site inspection of existing drains is sought for approval of Local Authority Building Control prior to connections to ensure the drain is structurally and hydraulically suitable

Exact position of drains to be established on site plus agreed with the Building Control Inspector