

Below Ground Drainage: Exact Drainage runs are as yet undetermined. Contractor to

ascertain exact runs, and report any findings to LA BCO for their approval on site. Foul water - Hepworth Supersleve or similar approved vitrified clay

pipework laid to falls of 1:40 (subject to site levels), installed strictly in accordance with manufacturers written instructions. Pipework below paved/grassed areas and having at least 300mm of cover to be laid on 100mm thick bed of pea gravel and backfilling to trench of selected excavated material to min depth of 150mm above crown of pipe. Pipework below paved/grassed areas having less than 300mm of cover to be encased in concrete not less than 100mm thick and having movement joints formed with compressible board at each socket or sleeve joint face. Drainage runs passing beneath the building to be surrounded with minimum 100mm granular fill except

where the crown of the pipe is within 300mm of the u/s of the slab when the pipe should be encased in concrete integral with the slab. Where a drain passes through a wall form an opening to give at least 50mm clearance all round the pipe and mask both sides of the opening with suitable rigid sheet material to prevent the ingress of vermin. Ensure adequate lintel support over such openings.

Surface water - Pipework as for foul water except laid to falls of 1:60 (subject to site levels). Surface water to drain to Main Sewer as determined on site. Roof Construction (flat):

Single ply membrane on 150mm kingspan insulation, on top of 18mm WBP laid on firrings and C24 s/w joists to specialists design and calculations.

Floor Construction - Ground Floor Solid: 75mm fibre reinforced sand and cement screed on top of 75mm kingspan insulation on 1200g Visqueen dpm, lapped with 2000g DPC in cavity wall. 150mm ground bearing slab with 1 layer of A252 mesh in middle, on compacted hardcore.

Internal Walls: 100mm studs at 400mmc/cs with acoustic quilt between - 12.5mm Gyproc TEN plasterboard and smooth skim finish.

Electrical Work:

All wiring and electrical work will be designed, installed inspected and tested by a "person qualified" to do so in accordance with the requirements of BS7671, the IEE 16th edition wiring guidance and Building Regulation Part P (Electrical Safety). On completion of works a copy of the installers Electrical Installation Test Certificate compliant with BS 7671 is to be provided to the Client and Local Authority. Prior to covering of all wiring / cables, the installation is to be inspected by Building Control. This could include a second check & testing of the installation by a Competent Person Scheme member. Electrical sockets and switches to be positioned 450mm min, and 1200mm max from floor level.

Any new wiring system or when rewiring an existing lighting system install energy efficient light fittings i.e. Only pin based fitting to be provided to lights to ensure only energy efficient fittings can be . attached.

Mechanical Ventilation: Provide manually controllable mechanical extract fans ducted to external air as indicated below:- Kitchen to be mechanically extracted via fan capable of 60 ltr/sec extract rate or via cooker hood 30 ltr/sec extract rate ducted to external air. Utility Room to be mechanically extracted via fan capable of 30 ltr/sec extract rate ducted to external air. WC to be mechanically extracted via fan capable of 15 ltr/sec extract rate ducted to external air. Bathroom to be mechanically extracted via fan capable of 6 ltr/sec extract rate ducted to external air. Rooms with no windows or opening lights fan to have 15min overrun and operate off main light switch. Replacement air provided to rooms with fans by 10mm undercut gap at base of door. Mechanical ventilation systems to be of an energy efficient type, ie specific fan power (SFP) for continuous supply only & continuous extract only to be 0.8 Watts / Litres/Sec

Doors, Windows and Roof Lanterns: All new windows to be powder coated aluminium Energy Rated A. double glazed, and have trickle vents not less than 8000mm2. All glazing to doors, and windows ajoining a door or less than 800mm above floor to be in toughened glass. Double glazing to be 4 - 20 - 4 with Pilkington 'K' glass to inner pane. Argon filled cavity. Windows to acheive U value of 1.2 W/m2k, doors to acheive U value of 1.8W/m2k - Preferred supplier is Spire Windows (Louth).

The design and construction of the proposals will satisfy the Governments Robust Construction Details in lieu of air testing the finished structure.

Lighting: One third of the primary light fittings in the proposed extension

(minimum one) to be of a type which will only receive high efficiency lamps.

Rainwater Goods: 100mm gutters to be connected into existing and to discharge to existing rainwater outlets. 100mm gutters to lean to with 68mm rainwater pipe to discharge to new/ existing gullys.

Plumbing:

WC to have 100mm connection to soil pipe. bath, shower to have 75mm deep seal anti vac traps with 38mm diameter wastes basin to have 75mm deep seal anti vac trap with 32mm diameter waste. All wastes bossed on to new soil and vent pipe. Any Combined wastes to be in 50mm UPVC pipes.

Primary & Secondary Heating Systems (New & Replacement) New installation or replacement for an existing system MUST comply with the provisions laid out in the "Domestic Heating Compliance Guide" published by the Department for Communities & Local Government. Check boiler manufacturer as to appropriate controls to be used to achieve Approved Document L1 compliance. Commissioning & Providing Information. All fixed building services are to be commissioned in accordance with the "Domestic Heating Compliance Guide" by a suitably qualified person depending upon the type of installation eg Corgi

(Gas), Hetas(Solid Fuel),Oftec(Oil) registered installers. On the completion of works:-A copy of the commissioning notice is to be provided to Building Control, confirming that compliant systems commissioning has taken place. The building owner must receive sufficient information about the building, the fixed building services & their maintenance

requirements to allow the energy saving provisions to be maintained. Instructions must show:- How to adjust timers/ temperature control settings & What routine maintenance is required. Mode of heating to extension as yet unknown if a new boiler to be fitted this is to have a Class A SEDBUK 86% energy efficiency rating.

Foundations: Building to be constructed on mass filled concrete foundations subject to inspection of trial pits by LA BCO.

Cavity Wall Construction: Brickwork outer leaf to match existing, subject to suitable brick match, 100mm cavity with full fill knauf cavity slab 32 insulation, 100mm Supabloc inner leaf (thermailite) with 12.5mm Gyproc TEN plasterboard and smooth plaster skim finish. Cavity wall ties @ 5 per sqm.

Roof Construction (pitched):

Roof tile to match existing as closely as practical, on sw treated battens, on Tyvek breathable roof membrane laid on proprietary trusses @ 400c/cs to specialists design and calculations. 300mm LR44 to ceiling void, with 12.5mm Gyproc TEN plasterboard and smooth skim finish.



