Roof– Marley Modern concrete tiles fixed on 40 x 30mm. battens over layer of type 2/3 breathable sarking felt BS 747 supported on 150 x 50mm. sc3 rafters at 400mm. crs. fixed at eaves wallplates and anchored to walls at 1200mm crs with gavd straps. Fix 200x 25mm. faciaboard to eaves with 100 x 20 soffit and 25mm. ventilation grilles. insulate roof with 120mm. thick Kingspan extruded polyurathene rigid insulation.

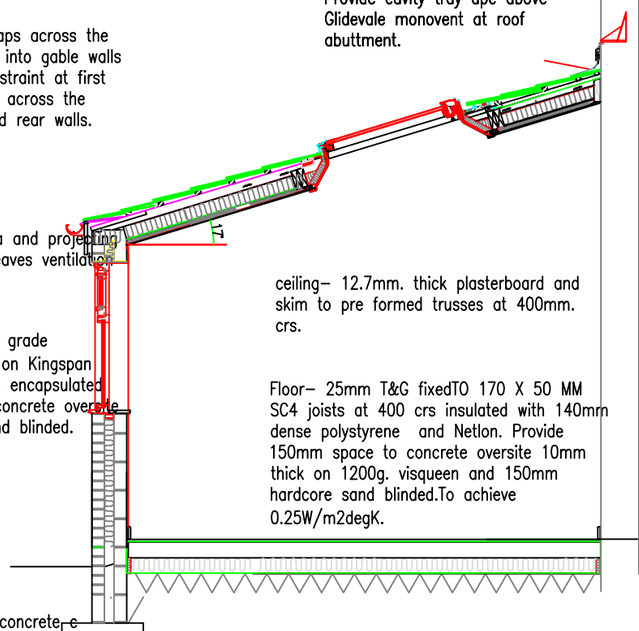
Fit CODE 4 lead apron flashing to abbuttments with cavity tray DPC.

Note– provision of lateral restraint straps across the new rafters at 1500mm crs, and built into gable walls along the verges. Provide the same restraint at first floor construction withstraps positoined across the floor joists and built into the front and rear walls.

Maintain continuous cavity structure with existing walls and bonded junctions.

Provide cavity tray dpc above Glidevale monovent at roof abuttment.

Note– provision of lateral restraint straps across the new rafters at 1500mm crs, and built into gable walls along the verges. Provide the same restraint at first floor construction withstraps positoined across the floor joists and built into the front and rear walls.



102 HR gutter fixed to 200 x 30 facia and projecting soffit board to match existing.Ensure eaves ventilation 25000mm2/M

ceiling– 12.7mm. thick plasterboard and skim to pre formed trusses at 400mm. crs.

New ground Floor – 25mm. thick floor grade chipboard Type 2/3 moisture resistant on Kingspan 140mm. extruded polystyrene insulation, encapsulated with 1200g Visqueen on 100mm.thick concrete oversite ,1200g. DPM. on 150mm. hardcore sand blinded.

Floor– 25mm T&G fixedTO 170 X 50 MM SC4 joists at 400 crs insulated with 140mm dense polystyrene and Netlon. Provide 150mm space to concrete oversite 10mm thick on 1200g. visqueen and 150mm hardcore sand blinded.To achieve 0.25W/m2degK.

Foundations– 600 x 250mm thick concrete c minimum 900mm. below ground level.30N /mm2.Foundation alongside existing to be under pinned to increase bearing capacity for new cavity wall or alternatively use trenchfill 600 x 600mm method if the existing wall is not suitable and has to be replaced and work must not encroach adjoining property. Provide proprietry tanking system at difference in ground levels to be constructed within the cavity wall along the boundary.

Cross Section A- A

Form a Fire protected barrier with Rockwool fire batts at roof abuttment with adjoining property and vertically between the cavity wall. Consent and subject to a Party Wall Act agreement.Differences in levels to be determined on site and all alterations to the satisfaction of the adjoining owner

ELECTRICAL INSTALLATIONS.(seeA/D Part P)
The proposed Electrical Installation earthing and bonding shall be strictly in accordance with the 16 th Edition of the I.E.E. Regulations N.I.C.E.I.C. and CORGI STANDARDS and will comply with the requirements of BS 7671 1992.The contractor shall provide all installation test certificates and notifications for early approval to the required statutory authority. All the sockets switches and lighting requirements shown on the drawings are Indicative and should be used for tender quotation purposes only. Client agreement and detailed requirements must be obtained thereafter. Fire detection and Alarm systems will be installed and wired in complete accordance with BS 5839. Part 1. Smoke detection systems will be optical and obscuration pattern type and will be fed exclusively from an uninterrupted mains feed supply. Emergency Lighting systems will be designed in accordance with BS 5266 Part 1.and in additionmust show compliancewith sections 43–47 of ammended document L1B(2006) edition use of energy saving light fittings.

DOORS/WINDOWS/GLAZING REQUIREMENTS.
Specification for the use of Doors and Windows will generally be manufactured from either softwood, hardwood, or UPVC materials must achieve average "U"value of 1.80W/m2K.(Client Selection) The glazing requirements will be double glazed sealed units to BS 6206 with Pilkington K low emmissivity glass panes 16mm apart and supplied with an approved manufacturers agrement accreditation certificate to satisfy the 2006 ammendments to Part L and F sections 3.7 to 3.15 of the Building Regulations. When any glazing system is within a height of 800mm from a floor level in internal or external walls and 1500 mm from floor level in a door side screen then safety glazing will be introduced to comply with the current codes of practice and with Part N Building Regulations and BS6262.

LINTOLS SUPPORT OF STRUCTURAL OPENINGS
All lintols unless otherwise stated will be BIRTLEY hot dipped galvanised mild steel cavity tray combined steel lintols to BS 5977 to the sizes and grades as recommended by the manufacturer. All lintols must achieve a minimum end bearing support of 150 mm. When the bearing is less than 150 mm a concrete padstones will be designed to accommodate the desired loading criteria. All lintols will be installed with insulated voids to prevent cold bridging. All lintols will receive plaster finishes to the backs and soffits to provide for half hour fire protection of the surfaces.

NATURAL/MECHANICAL MEANS OF VENTILATION
Ventilation openings to any habitable room to be in accordance with the approved document F1 1985 Building Regulations. Natural ventilation openings to be not less than one twentieth of the floor area of the room. All windows to have permanent ventilation louvres in the form of trimvents fitted to the head of the window frames to provide 8000mm2 of additional ventilation. In addition the Domestic kitchen will have an extractor fan capable of extracting at least 60 litres/ second (216m3 per hour) air replacement control. Domestic bathrooms and shower rooms will have an extractor fan capable of extracting at least 15 litres/ second (54m3 per hour) air replacement control intermittently. Domestic independant toilets will have an extractor fan capable of extracting at a rate of at least three air changes per hour air replacement control wich can be operated intrmittently and which has an overrun period of 15 minutes.

ABOVE GROUND DRAINAGE SYSTEMS
proposed pipework for internal uses applicable to BATHS, SHOWERS, URINALS SINKS ETC. pipe fittings and accessories PVCU to BS4514/BS5255 waste size 42mm diameter via 75mm deep seal traps. proposed pipework for internal uses applicable to WASH HAND BASINS ETC. pipe fittings and accessories PVCU to BS4514/BS5255 waste size 32mm diameter via 75mm deep seal traps. proposed pipework for internal uses applicable to WC wastes and soil and vent stack systems etc. pipe fittngs and accessories PVCU to BS4514 size 110mm diameter via appropriate branch type trap. proposed pipework for thr use of rainwater outlets etc. pipe fittings and accessories PVCU to BS4576 (APPROVED DOCUMENT H 1991 BUILDING REGULATIONS)

BELOW GROUND DRAINAGE SYSTEMS
Below ground drainage pipes will comprise of either 100mm diameter Hepworth vitrified clayware to BS 65 or 100mm diameter PVCU to BS 5481/ BS 4660 laid on granular bedding materials to BS 882 Table 4. The selected fill materials should be free from stones larger than 40mm, clay exceeding 100mm, timber, frozen materials or vegetable matter. Where rigid pipework of less than 150mm diameter have less than 300mm of cover or a rigid pipe of 150mm diameter or more hass less than 600mm of cover, then these pipes should be suitably encased within 150mm of concrete surround. Where flexible pipework are not located under a highway and have less than 600mm of cover then these pipes should be suitably encased within 150mm of concrete surround. When drainage runs are within 1.000m of any foundation and the level of the drainage trench is below the level of the foundation then that trench should be suitably backfilled with concrete. Any drainage pipe which may penetrate through a building structure below the finished ground level will be protected with a lintol support and a settlement gap of not less than 25mm which incorporates a flexible material to provide necessary protection to the drainage. All gravity drainage will have a minimum fall requirement of 1:40 to provide for self cleansing velocities. All gulley systems will be back inlet trapped type unless otherwise stated. Inspection chambers/ manholes up to a maximum depth of 900mm may be a proprietary system of PVCU material otherwise they will be constructed of 150mm thickness concrete base slab 1:2:4 mix with benching formed in 1:2 concrete mortar to 1:12 gradients. all trowelled smooth with appropriate channels, branches and connection bends. The walling of the chamber will be constructed with 215mm thickness Class B engineering brickwork to BS 3921 formed in English Garden wall bond to the required invert. 150mm concrete cover slab with the appropriate haunching forming the cover levels and frame. The inspection chamber cover will be mild steel and medium duty screw down sealed type unless otherwise stated. On completion of the works the entire drainage system will be tested for water tightness to the satisfaction of the local authority building control officer. (APPROVED DOCUMENT H 1991 BUILDING REGULATIONS)

HEAT PRODUCING APPLIANCES (GAS SYSTEMS)
Combination central heating boiler with domestic hot water Boiler will be wall mounted type gas fired with balanced flue incorporating mild steel protective cage to outlet terminal. The terminal will be positioned a minimum distance of 800mm from any window or door opening. Wall mounted gas fires will be positioned at a minimum distance of 225mm from the finished floor levels to flame point and be rated no greater than 7 kW.

BRICKWORK BLOCKWORK CONSTRUCTION
The external facing materials will be of a suitable material approved by the Local Planning Authority, comprising of 103 thickness facing brickwork to the external leaf constructed with 1:1:6 cement:lime:sand, with 100mm cavity incorporating 100mm Rockwool insulation material. 100mm thickness aercrete concrete blockwork(0.110wmk) on the internal leaf constructed with 1:1:6 cement:lime:sand with 13mm lightweight plaster surfaces internally finished. (ALL TO ACHIEVE A U VALUE OF 0.30 W/M2 deg C) The external and internal leaves are to be securely retained with approved wall ties to BS 1243: 1978. positioned 450mm apart vertically and 750mm apart horizontally. All cavities will be closed at the jambs and the eaves with blockwork materials and suitable Hyload damp proof course system. All cavities closed at the jambs, cills,and head situations will be suitably insulated to prevent cold bridging. Lean mix filling to cavities below ground levels and terminating 150 mm below the lowest damp proof course system. Brickwork below ground levels will be built with special quality brickwork as described in BS 3921 CLASS B Engineering brickwork. All the external walling situations will have ventilation openings in the form of air bricks to BS 493 ensuring that the ventilation air will have a free continuous path between opposite sides and to all parts of any enclosed floor voids. The openings shall be large enough to give actual openings of at least equivalent to 3000mm2 for each metre run of walling. Any trunking of pipework needing to carry ventilation air will have a diameter of at least 100mm. Movement joints to the external walling will be filled with Servicised Aerofil materials with Evode Low Modulus Silicone Sealant to brickwork faces. Foundations supporting any masonry structure will be in accordance with the approved document A1/2 SECTION 1E 1991 BUILDING REGULATIONS. All foundations are subject to existing ground conditions and will have not less than 600mm cover below ground levels. When the route of any drainage comes into contact with any external loadbearing structure supported with foundations then that foundation will be suitably positioned at a depth below the invert of that drain. Any oversite concrete floor slab will be level with or above the finished ground levels. Foundation designs must be approved by the local authority building control officer and subject to site investigations revealing the loadbearing strata. An unsuitable strata will necessitate the deposite of supporting strutural information. Any steel reinforcement to foundations to comprise of mesh steel fabric ref: B283. Any steel reinforcement to oversite concrete floor slabs to comprise of mesh steel fabric ref: A142

DAMP PROOF COURSES AND MEMBRANES
The horizontal and vertical damp proof courses will comply with the requirements of BS 743 and will be of a pitch polymer DPC material such as RUBEROID HYLOAD and will be incorporated in the following locations:
(a) Not less than 150mm above ground levels to all loadbearing walls and continuous with the inner leaf and with oversite concrete floor slab damp proof membranes.
(b) Positioned vertically and built into the jambs of all external door and window openings and behind cills and door thresholds.
(c) Positioned horizontally to all external door and window openings and behind all cills and door thresholds.

PROPOSED EXTENSION AND ALTERATIOS AT
109, Cowpen Road, Blyth, Northumberland

SCALE 1:50 M.

Sheet 03 /A3