NOTES

Break up existing paths and pavings as necessary. Clear site of works of turf and vegetable matter.

Foundation to walls to be minimum of 1 metre deep below finished external ground levels, or to such additional depths as requested by the Building Control Inspector. Concrete foundations (Grade C25) are to be 225mm thick, stepped as necessary, reinforced with 2 layers of B503 steel fabric, to the following widths:

Half Brick Walls	450mm
325mm walls	600mm
350mm Cavity Walls	600mm
Piers, chimney breasts etc.	175mm spread

Foundation walls up to damp proof course level to be built in hard-fired common bricks, or dense masonry concrete blocks, in cement mortar (1:3), with facing bricks where exposed above finished ground levels. Cavity walls to be filled solid to 150mm below damp proof course level with fine concrete (1:3:6). Build in 100 x 65mm prestressed concrete lintels above drainage and service pipes passing through foundation walls. 'Xtra-Load Elite' or similar pitch polymer damp proof course to be inserted to all walls at floor level, and to be minimum of 150mm above finished external ground levels.

Ground floors to be constructed of minimum 150mm sulphate free compacted hardcore, 25mm sand blinding, 1200G polythene membrane well lapped and turned up at edges into DPC, 100mm tamped concrete bed (Grade C25), 100mm Kingspan Kooltherm K3 or similar floor insulation with upstands at external perimeters, 500G polythene separating layer, 75mm cement and sand (1:3) floor screed, finishes by Client.

External cavity walls and gables to dwelling to be constructed of outer skin of Kassandra Multi Red facing bricks, 150mm cavity filled with 'Rockwool' or similar fibreglass cavity wall batts, inner skin of 100mm 'Thermalite' or 'Celcon' insulation blocks, dry lined internally with 12.5mm foil-backed plasterboard on dabs and skimmed in plaster. Cavity insulation to commence 150mm below d.p.c. level and to be taken to the top of the gable walls. Walls to open Porch to be constructed of 327mm thick walls and piers up to ground level built in hard-fired common bricks, or dense masonry concrete blocks, in cement mortar (1:3), with facing bricks where exposed above finished ground levels to the heights shown. Walls to be capped with special plinth bricks, and external returns. Build breast and stack in brickwork with facing bricks where exposed. Chimney to be built up to a minimum height of 600mm above ridge to the height shown. Line flues with 225 x 225mm rebated clay flue liners to BS 1181. Finish flue with clay chimney pot set and flaunched in cement mortar. Build in 150 x 150mm precast reinforced concrete lintel with splayed rear face over fireplace opening. Stainless steel cavity wall ties to DD140 Type 4, not butterfly type, to be built in at 750mm centres horizontally, 450mm centres vertically and at 225mm centres to openings. Build in 'Xtra-Load Elite' cavity trays to walls where roofing abuts. Oak posts and beams to open Porch to be formed from THA strength oak graded to BS 5756 (2007). Posts to be fixed to walls with 6mm steel base plate and shoe 175 x 175mm rawlbolted to brickwork with 4 – M8 x 80mm Rawlbolts to each shoe. Beams to be 100 x 100mm. All joints to be mortice and tenon and pegged with Beech pegs. Wall insulation to be linked to roof insulation at eaves. Cavities of hollow walls to be closed with Thermabate PVCu cavity closers at jambs and sills to openings. Form splayed brick-on-edge cills to windows in matching cut facing bricks. Build in 225 x 150mm terra cotta/matching air bricks to give air intake for fireplace and central heating boiler with cavity liner and fit fly proof vents internally. Build in gas and electric meter boxes in external skin of hollow walls. Internal block walls to dwelling to be constructed of 100mm 'Thermalite' or 'Celcon' insulation blocks, dry lined both sides with 12.5mm plasterboard on dabs and skimmed in plaster. Build in 'Catnic' lintels CG150/100 over external door and window openings all with minimum 150mm end bearings. Build in 100 x 65mm prestressed concrete lintels to openings in 100mm walls. Apexes and exposed walls to dormers, and apex to porch to be constructed of oak coloured UPVC boarding on 50 x 25mm softwood battens on layer of Kingspan 'nilvent' or similar approved breathable membrane on 19mm WBP plywood on 100 x 50mm sawn softwood studding, 12.5mm foil backed Gypsum wallboard, scrimmed and skimmed in 'Thistle' board finish plaster, 'Kingspan Thermawall TW55 zero ODP' or similar insulation 100mm thick fixed between studs.

Provide and fit gas fire and surround to Client's choice in Lounge. Form flue in Dunbrik Mini Clearflow Gas Flue Block System comprising Gas Fire Recess and gas flue blocks. The new flue requires installing, commissioning and certifying by a suitably qualified person. A notice plate is required which gives essential information for the correct application and use of the flue or chimney. The notice should convey the following information:

1 The location of the hearth, fireplace (or flue box) or the location of the beginning of the flue.
2 The category of the flue and generic types of appliances that can be safely accommodated.
3 The type and size of the flue (or its liner if it has been relined) and the manufacturers name.
4 The installation date.

The notices should be robust, indelibly marked and securely fixed in an unobtrusive but obvious position within the building such as: next to the electricity consumer unit or next to the chimney or hearth described or next to the water supply cock.

Internal stud partition walls to be constructed of 100 x 50mm sawn softwood sole and head plates, vertical studs at 600mm maximum centres, noggins in 1200mm centres, faced both sides with 12.5mm Gypsum wallboard, scrimmed and skimmed in 'Thistle' board finish plaster. Fill cavities with 100mm fibreglass insulation quilt. Internal stud partition walls between dwelling and roof spaces to be constructed of 100 x 50mm sawn softwood sole and head plates, vertical studs at 600mm maximum centres, noggins in 1200mm centres, faced one side with 37.5mm Kingspan Kooltherm K18 dry lining board, scrimmed and skimmed in 'Thistle' board finish plaster. Fit 100mm thick Kingspan Kooltherm K18 framing board between studs.

First floors to be constructed of 50 x 225mm sawn softwood C16 grade joists at maximum 400mm centres, with minimum 90mm end bearings, covered with 22mm T. & G. flooring grade chipboard, 100mm mineral wool with a minimum density of 10 kg/m to be laid in floor void, ceiling of 12.5mm Gypsum wallboard, scrimmed and skimmed in 'Thistle' board finish plaster. Where joists are supported on external walls, joists are to be supported on galvanized steel joist hangers built into walls or built in with Manthorpe or similar approved joist seals fitted at ends. Double joists to be provided beneath stud partition walls. Staircase to be trimmed with double floor joists bolted together with 12mm bolts and double-sided tooth plate connectors at maximum 900mm centres. Row of 38 x 38mm herringbone strutting to be fixed at midspan where spans of joists exceed 2.50 metres and double row at one-third span where spans exceed 4.50 metres. End three joists running parallel with external walls to be strapped down with 30 x 5mm galvanized straps at maximum 1800mm centres.

Main pitched roof to be of Staffordshire Blue plain tiles to on 38 x 19mm sawn battens, to 100mm gauge on layer of Kingspan 'nilvent' or similar approved breathable membrane, sawn softwood C16 grade construction to be of 50 x 150mm rafters at maximum 400mm centres, 38 x 225mm ridges, 150 x 19mm valley boards, 75 x 225mm purlin over Landing, 152 x 89 x 16kg/m UB steel purlin under dormer to Bedroom 2, 178 x 102 x 19kg/m UB steel purlins over rear of Bedroom 1, and over Bedroom 3, 203 x 102 x 23 kg/m UB steel purlin over Bedroom 2, and 254 x 146 x 31kg/m UB steel purlin over Bedroom 1/En-Suite & Bathroom. All steel purlins to have 100 x 50mm plate bolted to top flange at maximum 900mm centres ends set on 225 x 100 x 65mm padstones, 100 x 75 wall plates, 50 x 150mm ceiling joists at maximum 400mm centres, 75 x 200mm ceiling binder over Landing, 152 x 89 x 16kg/m UB steel binders over Bedroom 1 & Bedroom 2/3 with 100 x 50mm plate bolted to bottom flange at maximum 900mm centres ends set on 225 x 100 x 65mm padstones. Double rafters to be fitted at each side of dormers. Where collared ceilings occur ceiling joists to be bolted to rafters with 12mm bolts and double-sided tooth plate connectors. Sloping ceilings to roof slopes insulated with 100mm thickness of Kingspan Thermapitch TP10 rigid urethane insulation fitted between rafters leaving a minimum of 25mm air space above the insulation, and underside of rafters lined with Kingspan Kooltherm K18 insulated dry lining board 62.5mm thick, scrimmed and skimmed in 'Thistle' board finish plaster. Open Porch roof to be of Staffordshire Blue plain tiles on 38 x 19mm sawn battens, to 100mm gauge on layer of Kingspan 'nilvent' or similar approved breathable membrane, sawn softwood C16 grade construction to be of 50 x 100mm rafters at maximum 400mm centres birdsmouthed over 100 x 100mm THA strength oak graded to BS 5756 (2007) beams, 50 x 100mm ceiling joists at maximum 400mm centres, and 25 x 150mm ridge. Provide and fix code 4 lead flashings with soakers to chimneys and at intersections of roof with walls. Provide and fix code 4 lead slate with sleeve where vent pipes passes through roofing. Provide code 4 lead saddle at intersection of ridges with roof slopes. Wall plates to be strapped down at maximum 2 metre centres with 30 x 2.5mm galvanized straps. Verges and ceilings to be strapped down at minimum 2 metre centres with 30 x 5mm galvanized straps spanning 3 rafters or ceiling joists and turned down over walls. Ceilings to dwelling of 12.5mm foil backed Gypsum wallboard, scrimmed and skimmed in 'Thistle' board finish plaster. 'Fibreglass Crown 75' or similar insulation, 100mm thick, laid between joists with 170mm thick insulation laid over this, and a further 100mm layer on top of this, all layers at 90° to each other. Ceiling to open Porch to be of 12mm WBP plywood. Supply and fix spring assisted sliding timber loft access hatch and ladder insulated, boltable and draught proofed. Fit UPVC fascias, barge boards and soffits with boxed ends at intersection of fascias and barge boards on timber bearers or gable ladder framework. Gutters and rainwater pipes to be in UPVC. Gutters to be Marley Flowline Rectilinear 112 x
60mm gutters laid to 1 in 600 falls, with 65mm square rainwater pipes discharging into trapped gullies.

Fit softwood stock mouldings as follows; 25 x 125mm torus moulded skirtings, 25 x 75mm torus moulded architraves, 25mm quadrants and 25mm softwood rounded window boards.

Windows to be oak faced UPVC double-glazed with glass 16mm apart with Pilkington 'K' Low E coating of 0.15 rating, and draught proofed and should attain a 'U'- value' of 1.60 W/m^2 .K. Windows to Kitchen & Bathrooms to be fitted with trickle vents to give a minimum of 5000mm of background ventilation. Windows to other habitable rooms to be fitted with trickle vents to give a minimum of 10000mm of background ventilation. Windows to habitable rooms to have opening areas minimum 5% of floor areas. Windows to Bedrooms to have an unobstructed opening at least 450mm wide and 750mm high, and the bottom of the window opening is not to be more than 1100mm and not less than 800mm above the floor as a means of escape. First floor windows to be fitted with restrictors to limit the opening of casements, but those to escape windows to have override device which can be activated in an emergency. Escape windows are not to be fitted with any locks. External doors and frames are to be UPVC minimum 775mm clear width, double glazed in 4mm toughened glass units and fitted with brass effect ironmongery to Client's choice and having a U-value of no more than 2.2 $W/m^2.K$. French doors to be fitted with trickle vents to give a minimum of 8000mm of background ventilation. Glazing to doors and side panels within 1500mm above floor levels, glazing to windows within 800mm of floor level to comply with the European equivalent of BSEN12150, and shall either break on impact so as not to cause injury, or resist impact without breaking and must be safety glazed as defined in Building Regulations N1. Form level threshold and landing 1200mm wide outside front door ramped down not steeper than 1 in 12 with a 100mm high raised kerb on open sides, landing and ramp to have slight fall away from the dwelling to adequately drain the areas. All new external frames to be bedded in cement mortar and pointed externally in coloured mastic, and internally with silicone sealant. Internal doors to be to Client's choice minimum 750mm clear width, set in softwood rebated linings. All ironmongery to be to Client's choice.

Staircase to be in softwood, 200mm risers, 220mm goings, maximum pitch 42°, and, 800mm wide with minimum 2000mm clear headroom above pitch line. Handrail to be between 900 and 1000mm above pitch line. Landing balustrade to be 1100mm high above floor level. Balusters to be at such centres so as not to permit the passage through it of a 100mm diameter sphere. Soffit of stairs lined with 12.5mm Gypsum wallboard, scrimmed and skimmed in 'Thistle' board finish plaster.

Kitchen fittings to be to Client's choice.

Provide and fix Worcester Greenstar 42CDi Classic combination boiler in Utility with horizontal RSF flue solution through wall. Install cold-water storage tanks in roof space and insulate all pipework and tanks in roof spaces. Provide and fix sink unit, bath, shower, basins and WC suites all to Client's choice. WC suites to have dual flush facility and cistern not to exceed 6 litres capacity. Shower to be fitted over bath. All wastes to be fitted with 75mm deep seal traps, sink, bath and shower wastes to be 38mm, basin wastes to be 32mm diameter. Floor joists are not to be cut out for wastes, these are either to run in floors between the joists, or to be above the floors and be boxed in with softwood framing and plywood, or below the floors and be boxed in with softwood framing, plasterboard and skimmed in 'Thistle' board finish plaster. Soil and vent stacks to have roddable access doors and to be carried up above windows within 3 metres of pipe by at least 1 metre and fitted with suitable bird cage. Stub stack to WC to be fitted with air admittance valve 1200mm above floor level. Box in soil and vent stacks with softwood framing, and 2 layers of 12.5mm plasterboard and skimmed in 'Thistle' board finish plaster to achieve 30 minutes fire protection, and pack around pipe with fibreglass insulation. (New Regulation 17K for new dwellings or where a new dwelling is created by a material change of use where a building (or part of a building) is used as a dwelling where previously it was not or where a building (or part of a building) contains a flat where previously it did not.) Within 5 days of completing the dwelling, detailed calculations, calculated in accordance with the methodology set out in the *'Water Efficiency Calculator for New Dwellings'* published by the CLG, recording the actual flush rates of WC's, bath capacity, flow rates of basin taps, sink taps and showers, where applicable and including actual or default rates for washing machines and dishwashers as well as any alternative water re-use systems will be provided to Building Control so that a Completion Certificate can be issued. This must show that the actual items used consume less than 125 litres per person per day, not the estimated use as Design Stage. A record of the alternative sources of water used in the water calculation and supplied to the dwelling is to be provided along with sufficient other information enabling building owners to maintain the building and its services so as to maintain the water efficiency of the building. Wholesome water is to be provided where drinking water is drawn off and to the sink in areas where food is prepared. Wholesome or softened water is to be provided to all relevant fitments within the building. Wholesome water or softened water or water of a suitable quality from an alternative source is to be provided to the WC's. The water supply pressure and appliance flow rate are to be sufficient to operate all relevant fittings and appliances. Where necessary a booster pump is to be provided. Where water is taken from an alternative source a risk assessment must be carried out by the system designer to ensure its treatment and quality are suitable for the purpose. The water treatment system must fail safe for any identifiable risk, including mechanical breakdown, lack of maintenance and power failure. All pipework conveying water from alternative sources must be clearly marked as such. Heated wholesome water or softened wholesome water is to be provided (with the hot tap on the left) to any relevant fitting in the building. The hot water system provided in the building is to be designed, constructed and installed so as to resist the effects of temperature and pressure and will be adequately supported. Also, where this has a hot water storage vessel, it shall incorporate precautions to prevent the temperature of the water stored from exceeding 100 degrees centigrade, and ensure that any discharge from safety devices is conveyed to where it is visible but will not cause a danger to persons in or about the building. A device (typically an inline blending valve) is to be provided to baths with the dwelling preventing the water that is delivered to the bath from exceeding 48 degrees centigrade. A permanent and visible notice is to be fitted to the hot water storage system as detailed in Paragraph 3.23 and 3.24 of Approved Document G, and should be done when the system is commissioned by a suitably qualified person, with notice of the commissioning being provided to Building Control. Install gas points in Kitchen for cooker and in Lounge for Gas fire from meter in copper tube.

Information essential to the correct application and use of the heating appliance in the Lounge shall be permanently posted in the building. Details of this to include the following – category of the flue and generic types of appliances that can be safely accommodated, the type and size of the flue, and the manufacturer's name and the installation date. Radiators to have thermostatic valves fitted and to be installed in all rooms, Hall and Landing. Installation, testing and commissioning certificates are to be provided for the gas installation, heating and plumbing systems completed by suitably qualified and competent persons in a recognized industry format indicating compliance with the requirement of Regulation L1. The calculated output of radiators shall be sufficient to maintain the following temperatures when the atmospheric temperature is –1 ^{o}C :-

Kitchen	18 ^{o}C	Utility	18 ^{o}C
Lounge	21 ^{o}C	Dining Room	21 ^{o}C
Hall	18 ^{o}C	Landing	18 ^{o}C
Bathrooms	21 ^{o}C	Cloakroom	21 ^{o}C
Bedrooms	18 ^{o}C		

A Standard Assessment Procedure (SAP) rating is required in accordance with the Building Regulations L1. This should be submitted to the Building Control Authority no later than 5 days before the occupation of the dwelling. A copy of this SAP rating should be fixed in a conspicuous place within the relevant premises. This should indicate clearly the energy efficiency rating of the proposed dwelling. An Energy Performance certificate will also be required.

Carry out electrical works all to Client's choice with lighting points in all rooms, Staircase, Landing, Hall & Roof spaces. All lights to be low energy efficient lighting points provided in accordance with regulation L1B; 2B Paragraph 45. Any external lighting is to automatically extinguish when there is enough daylight, and when not required at night. Provide and fix power points to Client requirements. Install cooker control in Kitchen, shaver points in Bathrooms, electrical work for central heating installation and showers. Fit TV points in Kitchen, Lounge, and all bedrooms. All electrical sockets to be sited between 450mm and 1200mm above floor levels. Any downlights in ceilings are to be fitted with Tenmat FF109 or similar downlight covers. Electrical works to comply with Building Regulations Approved Document P in respect of Safety which encompasses Design, Installation, Inspection & Testing of Electrical Installations. The Electrical Contractor carrying out work on this scheme must be competent and registered with a Part P self-certification scheme to provide a self-certification certificate to the occupier and a notice to that effect (or a copy of the certificate) to the Local Authority not more than 30 days after completion of the work. All electrical works to conform to the latest safety guidelines from the B.S.I. and the I.E.E. as codified in BS 7671, Requirements for Electrical Installations. Installation, testing and commissioning certificates are to be provided for the installation, completed by suitably qualified and competent persons in a recognized industry format. Mains operated interconnected self-contained smoke alarms to conform to BS 5839 Part 1 with back-up power supply to be installed in Hall & Landing and permanently wired to a separate fused circuit at the distribution board in accordance with Section 1 of Approved Document B Vol. 1 2006 Edition. Mains operated heat detector alarm to be installed in Kitchen and permanently wired to a separate fused circuit at the distribution board. Alarms to be fixed to ceilings at least 300mm from any wall or light fitting, and not over a stair shaft. Fans capable of extracting air at a rate of not less than 15 litres per second to be fitted in Bathrooms, and fans capable of extracting air at a rate of not less than 60 litres per second to be fitted in Kitchen and Utility. Fans capable of extracting air at a rate of not less than 15 litres per second and to give at least 3 air changes per hour to be fitted in internal WC with duct and grille to external air, and linked to light switch with 15-minute overrun.

Robust Standard Details to be incorporated to meet the requirements of Part L of the Building Regulations.

Paint or stain all new woodwork on completion. Carry out all other decoration works to Client's requirements.

All drainage works to be in 100mm Hepworth's 'PlastiDrain' to 1 in 40 falls, bedded on and surrounded with pea gravel. All drains passing under buildings to be encased in minimum 150mm concrete. All storm drainage gullies to be trapped and fitted with galvanized grating. Locate existing foul drain and connect new system to this. Storm drainage to run to soakaway 1200 x 1200 x 1200mm below incoming invert, and to be filled to within 300mm of surface with clean limestone, covered with 1200-gauge polythene sheeting and topsoil. Soakaway to be sited a minimum of 5 metres from building. A percolation test is to be undertaken to determine that the size of the soakaway is adequate. All inspection chambers to storm drainage to be in 300mm diameter polypropylene set on minimum 150mm thick concrete bases, comprising base unit, raising pieces as required and Polymer covers and frames. All inspection chambers to foul drainage to be in 475mm diameter polypropylene set on minimum 150mm thick concrete bases, comprising base unit, raising pieces as required and ductile iron covers and frames.

Form access drive turning and parking areas TarmacDry porous asphalt paving system on minimum 150mm thickness of limestone hardcore, edgings to be 150 x 50mm concrete on 150 x 75mm concrete foundations and haunching. Form patio paving and steps with pavings to Client's choice on minimum 150mm thickness of limestone hardcore. Where paving is laid over any root protection area, this shall be of 'no dig' construction and to be formed of Terram Geocell Confinement System or similar base. The domestic refuse is to be brought forward to the front of the property on collection day. New fencing to be of slotted concrete posts set in concrete with 300mm high concrete gravel board to base and 1500mm high treated softwood woven panels. Form area for the storage of waste containers; 1200 x 1200mm of 600 x 600mm concrete flags on minimum 150mm thickness of limestone hardcore. Area to have slight fall away from the dwelling to adequately drain it. Sited so that the householder is required to carry the refuse not exceeding 30 metres, and no more than 25 metres from the waste collection point. Tree protection shall be installed to all retained trees by means of 'Heras' type fencing supported on scaffolding all as BS 5837, 2005 Figure 2 to the perimeter of the Root Protection Area.

Supply and lay topsoil and turfing at rear of property as shown on Drawing Nr. 1808/12/02. Shrubs as shown on Drawing Nr. 1808/12/02 to be a mix of Cotoneaster Franchetti, Common Broom, Daphne odora Aureomarginata, Pachysandra Terminalis, Euonymous Gold & Silver & Cotoneaster conspicorus 'Decorus' spaced a minimum of 1 metre apart. These to be pruned as necessary after the first growing season and any failed shrubs to be replaced. Borders as shown on Drawing Nr. 1808/12/02 to be planted out with a mixed variety of perennial plans. Any failed plants to be replaced as required.

Site to be left clean and tidy on completion and any damage to adjoining areas to be made good. All works to be carried out in strict accordance with all relevant BS Codes of Practice, good building practice and all relevant Health & Safety Legislation. All dimensions and levels to be checked on site.