SPECIFICATION FOR THE SINGLE STOREY EXTNSION TO THE FRONT AND CAR PORT TO THE SIDE AT 33, BRIDGE WAY, SHAWBURY, SHROPSHIRE SY4 4PG.

Clients Mr J Singh and Mrs P Kaur.

BOUNDARIES.

No part of any of the proposed construction is to encroach over any boundary.
Due to the proposal being within 3 m of a boundary to an adjoining property it is advisable to give 2 months written notification to the rightful owner of the adjoining property as to when construction is going to commence if / and when planning approval and building regulations approval have been granted.
All efforts will be made to ensure that the existing parts of the works that may affect the neighbours property will be safeguarded and if any damage is sustained then it will be rectified and made good or to the same standard it was before works commenced.

EXISTING CONSTRUCTION.

The existing walls and lintels are to be assessed for their suitability by the inspecting officer.
Where the new works are adjacent to the existing then the plasterwork will be stripped back and new work taken from the existing and renovated.

DEMOLITION.

Skips are to be provided to allow the removal of all waste products and materials.
Demolish the existing parts of the building that are being replaced and cart away from site.
Demolish the existing UPVc porch.

FOUNDATIONS.

All the new foundations are to be to the inspecting officer's approval.
Foundations to be of a strip design type 610mm x 229mm and at a minimum depth of 1 metre.
Concrete to be 1:2:4 mix.

DRAINS.

All new drains are to be 100mm diameter pipes with flexible sockets and joints and laid on a 150mm granular bed and surrounded by the pea gravel.
Fall of the drains is to be 1:40.
Where the drains pass through or under the walls then form reinforced concrete lintels over.
Where the drains pass under the floor then encase them in concrete and form expansion joints also embed reinforced mesh in the concrete above the line of the drain to give additional protection.
The SVP to the Shower room is to be a 100mm diameter stub stack and is to have an air admittance valve positioned above the spill over point of appliances.
The waste pipes are to be plastic and fitted with an anti-syphonic traps and are to have access caps fitted at the end of the pipes.
The waste pipes to the shower are to be 40mm and 32mm to the basin.

MANHOLES.

The existing manhole / chamber is to be connected to by new pipes.

RAINWATER GOODS.

New 100mm gutters that match the profile of the existing are to be screwed to the fascia board by brackets and then discharging into 63mm diameter downpipes.
The existing downpipe that serves the main roof is to be cut and drain onto the new roof.
Connect the new rainwater downpipes to the existing system if it can be traced. If the existing rainwater system is not of adequate quality or size to allow the new rainwater to flow into it then provide a new layout and use 100mm pipes that will fall to a soak away which must be no nearer than 5000mm from the property and 5000mm from boundary.
Percolation test is to be carried out to confirm size and suitability of required soak away system and the calculations / details and results to be submitted to the inspecting officer.

CONCRETE FLOOR.
100mm Concrete slab laid on 150mm hardcore of broken brick and stone and should be completely free of contaminants and plaster, should be delivered to site via a supplier with a quality audit process in place and compacted sufficiently to support the slab and incorporate a 1200 gauge membrane DPM on a soft sand blinding.
The insulation below the concrete is to be 100mm Celotex or the equivalent with 20mm thick between slab and wall.
A separating layer is to be installed over the floor insulation to act as a second isolation membrane.
If Radon gas protection is required by the inspecting officer then it is to be achieved by installing a continuous 2000 gauge DPM with all joints and penetrations taped with special gas tape and over lapped by a minimum of 300mm the damp proof membrane should be continued across the external walling by means of a cavity tray arrangement, the floor may also need venting.

DAMP PROOF COURSE.
New DPC is to be at finished floor level and 150mm above outside ground level.
All the ends are to be fully lapped by 150mm.
The new DPC is to be fully lapped over the existing DPC at all abutments by at least 100mm.
All reveals are to be equipped with vertical DPC's.

CAVITY WORK.
The cavity wall is to be brickwork of a 102mm facing brick outer leaf that matches the existing style, texture and colour of the property with a 100mm Cavity and an inner leaf of 100mm insulation block for example, Celcon Solar or the equivalent.
Work below ground to is to be one of the following either a semi-engineering type with the cavity filled with lean mix compo up to a minimum of 225mm from DPC level or mass fill with concrete up to 150 below damp proof course or use trench style concrete blocks.
Reinforce wall with mild steel ties at 900mm horizontal cts and at 450mm cts vertically staggered.
Wall ties should also be provided and spaced not more than 300mm apart vertically, within a distance of 225mm from the vertical edges of all openings, movement joints and roof verges.
Insulation is to be 100mm thick Knauf Earthwool DriTherm 32 or the equivalent which is to be taken right up to the reveal of all openings.
All the cavities are to be sealed with insulated preparatory closers.
All returns to be no less than 655mm from the external corner.
Where new cavity walls abut the existing wall's the cavities should be taken through to the existing cavity to prevent cold bridging.

LINTELS.
All lintels externally are to be galvanized steel type something like or similar to a Catnic CG 90/100.
Lintels in the external cavity walls are to have a cavity tray with stop ends and leave weep holes in the outer leaf at the ends of the cavity tray.
All lintels to have a minimum of 150mm bearing and be concrete.

PLASTER WORK.
Walls to have a 12.5mm plasterboard dabbed to inner face of cavity work and skimmed over or the walls are to be rendered with a 25mm sand and cement render which has a waterproof additive and skimmed finish.
The ceilings are to be 12.5mm plasterboard skimmed over.
The stud partition walls are to have a 12.5mm plasterboard skimmed over with the void between the studs filled with fibre glass quilt to give sound insulation.
The stud partition walls are to be C16 grade 100mm x 50mm softwood timbers with a head and a base and noggins.

WOODWORK.
The new skirting will be planed softwood matching the existing and is to be screwed to the walls.
The new architraves will be planed softwood matching the existing.
The new door linings are to be 37mm softwood.
New doors are to be to the client's choice and hung on 2 or 3 hinges.

ROOF CONSTRUCTION.
The rafters are to be C16 grade 150mm x 50mm timbers at 400mm Cts.
The joists are to be C16 grade 125mm x 50mm timbers at 400mm Cts.
A 150mm x 50mm pole plate timber is to be bolted to the wall with 12mm Bolts at 600mm Cts.
All the rafters are to be cut with a birds mouth over the timber pole plate and wall plate.
The ventilation of the roof will be achieved by a 25mm continuous air gap at eaves level and a 5mm gap at ridge level and form tile vents 2/3rds up the roof slope.
Provide a cavity tray and flashing at the junction of the roof and wall.
The lateral support is to be mild steel straps at minimum Cts of 2 metres.
The insulation is to be loft roll 40 laid at 90 degrees to each other with at least 300mm over the timbers.
The wall plates are to be C16 grade 100mm x 50mm timbers secured to walls by 32mm x 6mm galvanized mild steel straps which will be at 1200mm cts.
The wall plates will be secured at right angles with dragon ties.
Clad the roof with concrete interlocking tiles that will be nailed to C16 grade 25mm x 50mm treated softwood battens which are in turn laid on one layer of untearable felt which should be vapour permeable and comply with BS EN 13859-1 or have third party accreditation (BBA cert).
All the tile fixing details are to be provided once they are available.
All the lead work is to be 5lb lead.
Where the new roof abuts the wall form a cavity tray if wall is cavity construction.
The gable is to have gable straps.

WINDOWS AND DOORS.
Windows to be double glazed with "K" glass low emissivity type which will have a 16mm air gap between the panes.
All windows are to have an area that opens that is equal to 1/20th of the total floor area.
The total area of glazing is to be no more than 25% of the total floor area.
The background ventilation will be achieved by installing trickle vents equal to 8000mm2.
To ensure that there is a waterproof seal between window and masonary the outside of window is to have a mastic seal run around where it is in contact with the brickwork.
All the critical areas will be safety glass to conform to BS 6206 and part K and marked accordingly, alternatively a supply invoice or certificate is to be provided upon completion.
All external glazed doors are to have a U Value of 1.6W/M2K.
Manufacturer and installer will confirm that the windows and doors will have a U Value of 1.5W/M2K and FENSA registered.
Ensure that all toughened glass is in accordance with BS EN 12600.
Ensure all doors and windows comply with PAS 24 requirement.

EXTRACTOR FANS.
The extractor fan to the Shower Room will be capable of expelling 60 litres per Second and will have a 15 minute over run.
The fan to have at least 3 air changes per hour.
All the extraction outlet grills are to be a minimum of 1750mm from the floor.
All the wet rooms are to have an air inlet.

SHOWER ROOM DOOR.
The door to the Shower Room will have a 10mm gap at the bottom.

LIGHT FITTINGS.
75% - 100% of all the new internal light fittings are required to be energy efficient with a luminous efficiency greater than 45 lamp lumens per circuit-watt and the total output greater than 400 lamp lumens is required.

FASCIA & SOFFIT.
The fascia board is to be a C16 grade 25mm softwood / UPVc and nailed to rafter / joist ends.
The soffit is to be a C16 grade 25mm softwood / UPVc with a 25mm continuous air gap to allow ventilation of the roof.

HEATING.
Extend / modify the existing hot water system to accommodate new radiators.
The extended new heating system will include thermostatic radiator valves to the new radiators.
Installer to discuss with the client the position, design, size and type of radiators to achieve adequate temperature levels in each space.
All work involving a gas installation, must be carried out by a gas safe registered contractor and carried out in accordance with all the current regulations

ELECTRICS.
All new electrical sockets and switch positions to be discussed with the approved contractor prior to work commencing and must comply with the building regulations.
The design, installation and testing of the electrics are to be undertaken by an installer registered under a suitable electrical self certification scheme i.e. NICEIC or ECA or alternatively by a suitably qualified person who is competent to issue an installation, commissioning and testing certificates for works in accordance with BS 7671. Prior notification must be gained from the inspecting officer to establish which route the applicant / contractor wishes to undertake.
When any electrical installation work is classed as an extension, an alteration or a change of use then the existing and fixed electrical installation are to be checked to establish that they meet the requirements and that the mains supply equipment is suitable.

SCAFFOLD.
The correctly installed and erected scaffold will need to be used to work on the existing and new works.

CAR PORT.
The car port is to be a steel frame of something equal to 100mm square posts and frame.
The posts will be sunk into a 300mm x 300mm x 100mm deep concrete pad stone.
The roof will be a translucent sheet secured in place by the correct fixings.
The gutter will be away from the wall of 33, Bridge Way.
The downpipe that serves the new car port roof will fall onto the existing garage roof and to the existing guttering.
A flashing will be utilized where the new roof abuts the existing house wall.