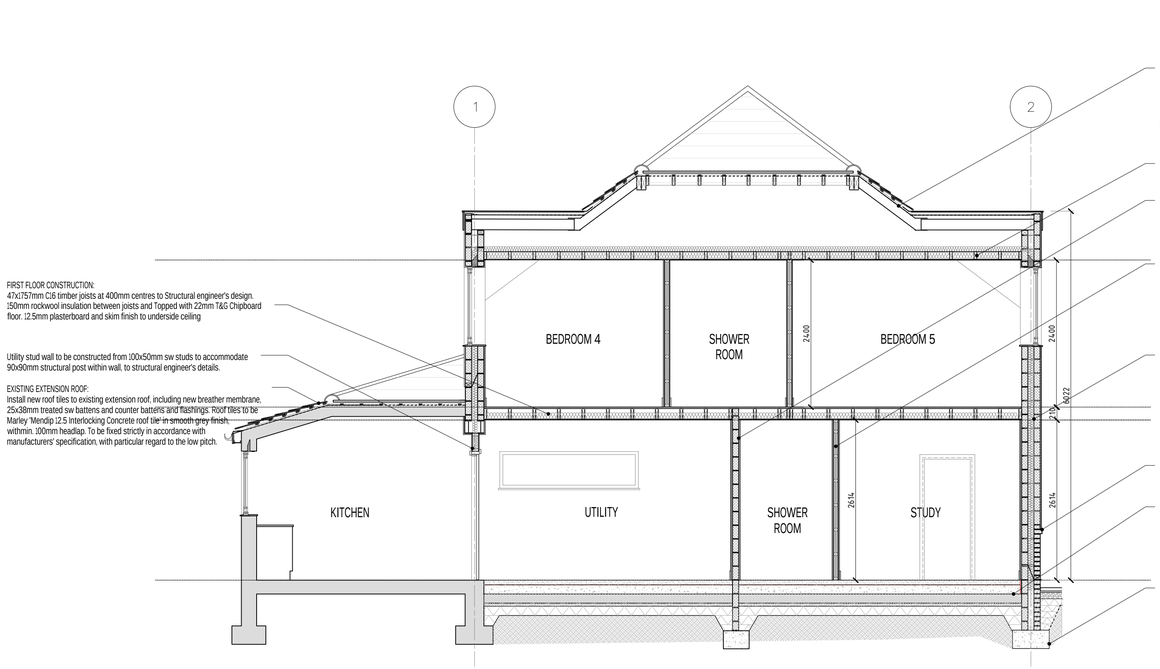
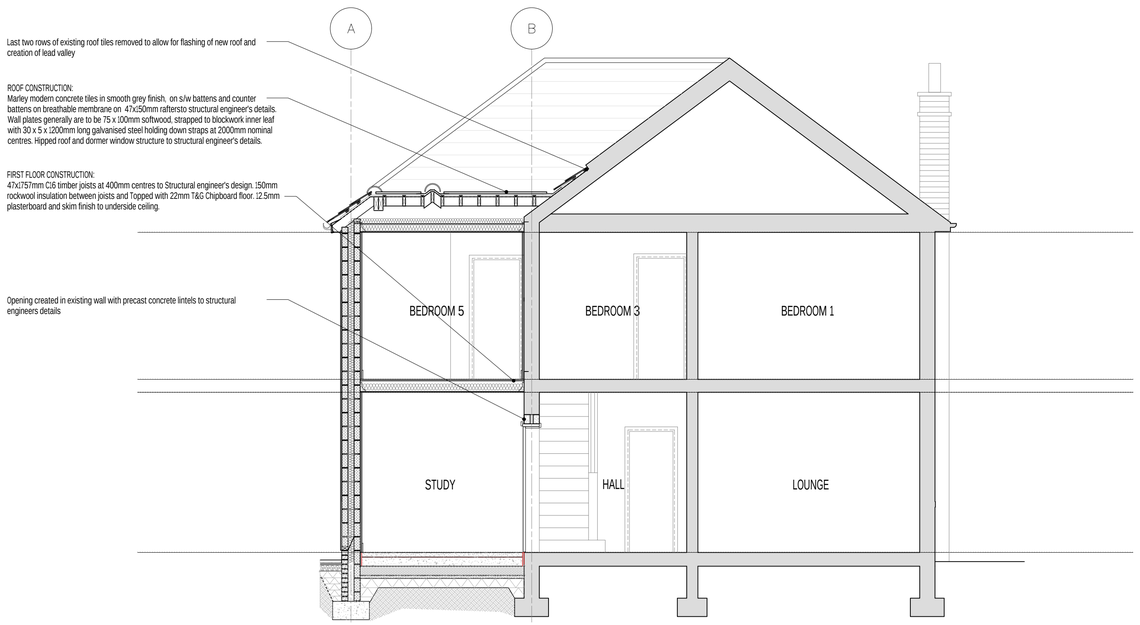
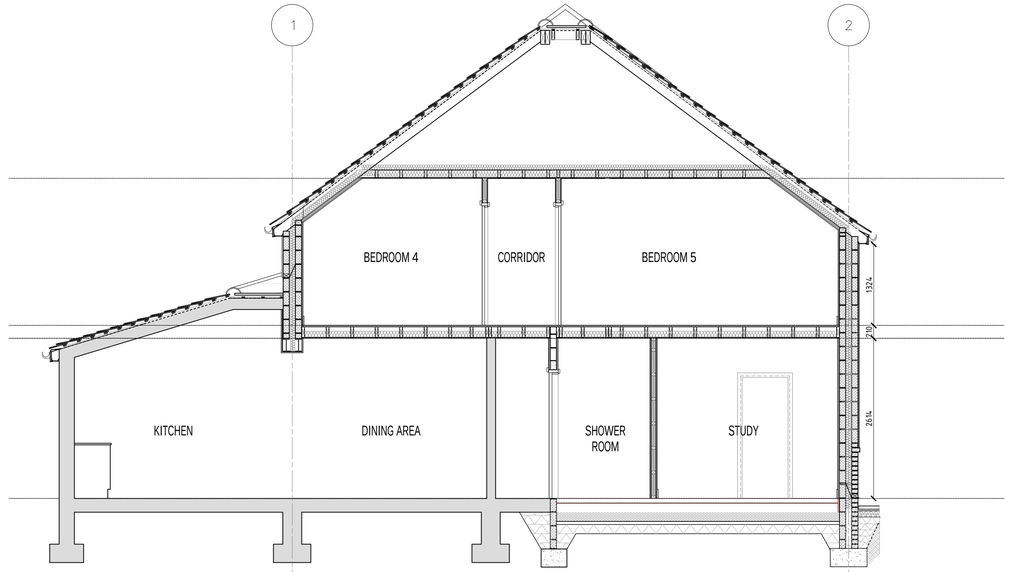


PROPOSED SECTION A-A | SCALE 1:50



PROPOSED SECTION B-B | SCALE 1:50



PROPOSED SECTION C-C | SCALE 1:50

GENERALLY
All structural s.w. to be double vacuum treated, or similar approved. Structural timber is to conform to B.S.5268, 1984. All timbers are to be preservative treated, including all cut ends. All materials must be of an approved quality. All work to be carried out to the satisfaction of The Building Control Officer (B.C.O.) .
All dimensions and details shall be checked on site by the contractor prior to commencing work. Any error must be brought to the attention of the Architect. All dimensions are in millimetres. No scaling of drawings is permitted.
All work is to be carried out to the satisfaction of the Building Control Authority and in full accordance with the latest amendments to the Building Regulations and Approved Documents. A Building Control completion certificate shall be issued on completion. Any deviation from the Approved Documents must have prior consent of the controlling authority (Approved Inspector), and be confirmed as such in writing.
All materials used must be of an approved quality, and upon request, samples submitted to and approved by the local authority in writing prior to construction commencing. Full verification of quality of materials to be submitted to the client upon request.
All services installed strict accordance with relevant statutory authorities recommendations and bye laws etc.
Foundations to be 600x200mm mass concrete strip footings. Depth to top of concrete to be as per existing house foundation, or 825mm - whichever is lower. The foundation design/size and depth for the extension must be agreed on site between the builder / principal contractor and the Approved Inspector.
Any works to the existing drainage on site / installation of new SVPs/ positions to be agreed on site between the builder / principal contractor and the Approved Inspector. All new and repositioned drainage gullies are to be connected to the existing main drainage runs, unless otherwise stated, to the satisfaction of the Approved Inspector.

GROUND FLOOR CONSTRUCTION:
Ground Bearing Slab - Proposed floor construction to consist of: 75mm sand cement screed. on 500g VIQSUEEN DPM separation layer, on ?50mm reinforced concrete slab to engineer's details with A142 mesh to top, on ?50mm Kingspan K103 Floorboard with 25mm insulation vertically to perimeter, on ?200g VISQUEEN DPM lapped and sealed to manufacturer's instructions on 50mm sand blinding, on a minimum ?50mm compacted hard-core sub-base. Ground Floor construction to achieve an elemental U value of 0.1W/m²K

FIRST FLOOR CONSTRUCTION:
First floor construction to consist of47x?57mm C16 timber joists at 400mm centres to Structural engineer's design. ?50mm rockwool insulation between joists and Topped with 22mm T&G Chipboard floor(glued and screwed to joists). ?2.5mm plasterboard and skim finish to underside ceiling. All perimeters to be sealed with tape / sealant. Noggins to be positioned in accordance with indicative layout and where required to support first floor partitions and plasterboard.

NEW EXTERNAL WALL CONSTRUCTION:
External Walls to consists of ?00mm medium density outer leaf with ?00mm cavity fully filled with ?00mm Dritherm Cavity slab 32 Ultimate. Inner skin to be ?00mm Thermalite Turbo or similar lightweight concrete block inner leaf (to be confirmed by Structural Engineer). ?2.5mm Gyproc Wallboard applied to internal face with 3mm skim finish. External blockwork to be finished in K-Rend thin coat render system: K Rend Reinforcing Mesh embedded into HP14 K Rend Basecoat (primed with K Rend thin coat primer), finished in K Rend TC15 Thin Coat Render in Pure White. All stop / edging beads to be in white uPVC. External wall to obtain a minimum ?.? value of 0.26W/m2K. Cavity ties to be austenitic stainless steel double triangle Type 4 Housing Cavity Wall Tie (Expamet PT250 or similar) in accordance with BS DD ?40: Part 2 and set out at maximum 900mm centres horizontally and 450mm centres vertically (density of 2.5 ties/m²), laid staggered, with additional fixings at corners, openings, movement joints and roof verges, i.e. ties positioned no further than 225mm away horizontally and spaced not more than 300mm apart vertically. If required, vertical movement joints to be introduced in accordance with the requirements of BS 5628-3. Shear resistance to be provided through use of suitable masonry movement ties with debonding sleeves.

D.p.c's to be 'Hyload' or similar polymeric d.p.c. membrane width to incorporate full width of external masonry leaf with 5mm projection. Ends to have min .?00mm overlap and to be fully sealed. Top of cavity walls to be sealed off with 6mm 'Supalux' board or similar approved non-combustable boarding. Horizontal and vertical insulated d.p.c's round all openings. Insulated cavity closers to all jambs and cills to all openings in external walls. (Thermabate by RMC Panel Products Ltd. or similar). Any new lintels in external walls to be pre-insulated with d.p.c's over and weep holes in external leaf at 900mm centres, sized to suit openings with minimum ?50mm end bearing each side. ?5x100 treated timber wall plate to be anchored to inner leaf of external wall with 30 x 2.5 x ?000 s.s. vertical restraint straps @ max. 2m centres, s.s. fixings. New Thermabate cavity closers (to suit cavity width?) to all new openings, with external grade polysulphide flexible mastic seal to exterior perimeter of all new windows/ flexible mastic seal to interior perimeter.

DORMER CHEEKS:
Dormer cheeks to be ?50x47mm timber frame at 400mm centres, fully filled with Kingspan K12 Framing board insulation. Externally clad in lead flashing on 18mm WBP Plywood fixed to 38x25mm treated sw battens and counter battens, on breather membrane fixed to timber frame. Internally finished with 87.5mm foil backed insulated plasterboard (Kingspan K18 or equal approved)

NEW INTERNAL WALLS:
New partitions to be timber stud as indicated. studs to be 50x?5mm 'scant' sw at 600mm vertical centres with noggins located at 450mm horizontal centres, faced either side with ?2.5mm gyproc wallboard and 3mm thistle multi finish skim. allow for ?5mm isover insulation in cavity and install ply patresses where wall fittings are required. *nb shower room side of partitions to be finished in moisture resistant plasterboard.Utility studwork wall to be constructed from ?00x50mm sw studs to accommodate 90x90mm structural post within wall, to structural engineer's details. New ?00mm concrete block (3.5n strength) partitions where indicated on the drawings and as confirmed by engineer to be finished in ?2.5mm gyproc wallboard fixed to wall with drywall adhesive dabs and finished with 3mm skim coat . all partitions to be securely fixed to the external walls

STRUCTURE:
All elements of structure to have a minimum ½ hour fire resistance. All internal partitions to be built up to the underside of the structural roof or floor over and fire stopped with mineral wool insulation and fire resistant seal to achieve ½ hour fire resistance. Structural details to be in strict accordance with the Structural Engineers calculations. Where steelwork members bear onto concrete pad stones, refer to structural engineers details and calculations. Structural steelwork and metalwork to be thoroughly clean and free from scale, rust and dust. Where not embedded into concrete, it should have one layer of red oxide paint immediately before fixing.

GLAZING, WINDOWS & NATURAL VENTILATION:
All glazing in critical locations to be safety glass in accordance with Part N. ie, between f.f.l. and ?500mm in doors and side panels within 300mm either side of doors. Safety glass in accordance with BS 6206: ?981. New windows to be in, UPVC frames, colour RAL 7016. Unless a higher standard of thermal performance is requested by the client, all new glazing shall be 28mm thick sealed double glazed units comprising 6mm float glass outer pane / ?5mm cavity, argon gas filled / 6.4mm laminated low emissivity inner pane to achieve a maximum centre pane U-value of ?.2 W/m²K. New windows to be fitted with trickle ventilators fitted within the head frame equivalent to 8000mm². Opening ventilation to habitable rooms to be not less than ?/20th of floor area. All new windows to habitable rooms shall incorporate within the fenestration design an opening light providing a clear opening of at least 0.33m² for the purposes of emergency escape. The opening light is to have minimum clear opening dimensions of at least 450mm in width x 450mm in height, with the bottom edge of the opening between 800mm and ?200mm above the finished floor level.

NEW PITCHED ROOF CONSTRUCTION: Marley modern concrete tiles in smooth grey finish, on s/w battens and counter battens on breathable membrane on 47x50mm rafterso structural engineer's details. Wall plates generally are to be 75 x ?00mm softwood, strapped to blockwork inner leaf with 30 x 5 x ?200mm long galvanised steel holding down straps at 2000mm nominal centres. Provide vapour check layer coincident with line of fire protection with taped joints as necessary to maintain integrity of vapour barrier. To comply with ADB2 9.4 main roof void to be separated by Fire barrier system supported by galvanized stitched wire mesh providing half hour fire resistance. Quilt 50mm thick and secured in strict accordance with manufacturers guidelines and instructions. Any penetrating pipe/duct work to be protected with Rockwool Fire Duct installed in complete accordance with manufacturers details and guidelines. Alternative insulating elements, to the above build up, are to be similar approved. Exposed soffit to underside of porch area to be supalux board to avoid maintenance. Roof to be insulated at ceiling level with ?00mm Knauf Earthwool loft roll between joists and 200mm over joists. In areas of reduced head height (either side of dormer windows), roof joists to be insulated with ?00mm Kingspan Kooltherm K7 Pitched roof board between joists, and 52.5mm Kingspan Kooltherm K18 Insulated Plasterboard fixed to rafters. 50mm ventilated airspace to be retained between rafters, and main roof loft space to be ventilated. All to achieve an elemental u value of 0.16w/m²k or better. Access hatch to loft space to be incorporated. Area of boarding for storage to be included into roof area

FIRE SPREAD:
Provide and fit heat and smoke detectors (to be mains wired interlinked) to positions indicated on the drawing. All to BS 5446 Part 1. Elements of structure to have 1 hr F.R.

HEATING & MECHANICAL VENTILATION:
Kitchen and utility to have extract fan capable of minimum extract rates of 30litres/ sec adjacent to the hob and 60litres/ sec (ventilation rates tbc by building control). Elsewhere ie: bathrooms, to be linked to light switch with ?5min overrun. humidistat and manual switch ducted to ext. air via ?00mm insulated flexible duct. The heating and hot water systems are to be commissioned so that at completion the systems and their controls are left in the intended working order and can operate efficiently for the purposes of conservation of fuel and power. Design and installation of new heating systems and the like are to be undertaken by a Gas Safe registered contractor. Pipe work should be insulated in all voids within the building envelope and within spaces normally heated if those spaces may be maintained at temperatures different to those maintained in other zones.

ELECTRICAL:
All electrical installations / alterations must be designed and installed to BS ?671:2008 Requirements for electrical installations. IEE Regulations. ?7th Edition (formerly IEE/BSI Requirements for electrical installations), and be undertaken by a registered electrician, ECA member or similar.
All new electrical fittings shall display the British Standard Approved Kite symbol and MK Shield of Approval. All electrical work is required to meet the requirements of the latest revisions to Part P of the Building Regulations, and must be designed, installed, inspected and tested by a person competent to do so, i.e. a competent person registered under a self-certification scheme for electrical installation as detailed in Appendix E of the Approved Document. Upon completion, an appropriate BS ?671 electrical installation certificate must be issued for the work by a person competent to do so. All new sockets to be positioned at 450mm above FFL unless otherwise stated (eg. kitchen sockets above worktops). All new switches to be positioned at ?00mm above FFL unless otherwise stated. Dwelling to be provided with a fire detection and alarm system in accordance with the relevant recommendations of BS 5446 Components of automatic fire alarm systems for residential premises. Part 1 Specification for self-contained smoke alarms and point-type smoke detectors.Where more than one smoke alarm is installed, they should be linked so that the detection of smoke by one alarm operates the alarm signal in all of them. Cooker hoods should be 650mm - ?50mm above the hob surface or in accordance with the manufacturer's written instructions.

DRAINAGE:
Current Drainage layouts are indicative and to developed by the appointed structural engineer following on site investigations. Generally, below ground drainage shall be installed to BS 8301 and above ground drainage to BS 5572. Contractor to assess existing drainage layout and provision on site, both above and below ground, and agree the new layout / amendments to existing layout with the architect / client / structural engineer / BCO as appropriate. New SVP's / stub stacks with air admittance valves are to be a minimum ?00mm diameter PVCu to BS EN ?329-?: 2000, with all connections to be off-set. Small pipes – ?0mm diameter, large pipes – 200mm diameter. SVP's shall terminate 900mm above openings within 3m and are to be fitted with proprietary perforated cowls allowing free ventilation. Rodding access to be provided at all bends. WC wastes to be ?00mm diameter. WC connections to be connected directly to the branch at 45 degrees or 25mm sweeping radius on a ?00mm diameter pipe @ ?0mm/m fall with minimum 75mm deep water trap and maximum 6m branch from SVP. Sinks, WHB's, baths and showers are to connect via 38mm diameter pipes with anti-syphon traps with maximum branch of 3m from SVP and fall of 45mm/m. All rainwater goods to be UPVC to match existing. New gutters and downpipes to be deep capacity type with 75mm diameter being the minimum size of pipe. Pipes and gutters to be fixed in strict accordance with the manufacturer's details. Hopper locations are on drawings, new gullies and downpipe locations to be agreed on site between the contractor and Building Control Officer / Approved Inspector to best suit the existing / amended drainage layout. The contractor shall allow for all modification works to allow new connections to existing drainage, as required. All drainage and connections should be to the complete satisfaction of the building control officer.

THERMAL BRIDGING:
The Contractor is to ensure that the works are undertaken in accordance with current PART L APPROVED CONSTRUCTION DETAILS and proof of adoption of these details will be required on completion. All work to be shown and verified by the site manager in accordance with the details.

STATUS: TENDER

REVISION	DRAWN	CHECKED	DATE

SHACKARCHITECTURE ltd
A Unit 5, The Curve, 139 Telegraph Road, Heswall, Wirral, CH60 7SE
T +44(0)151 342 6516 E info@shackarchitecture.com W www.shackarchitecture.com

Client OLIVER STEWART AND NYREE CRAVEN
Project HEATH DRIVE, UPTON
Title PROPOSED SECTIONS
Scale VARIES@A1 Project. No. SHACK456 Dwg. No. C111 Rev