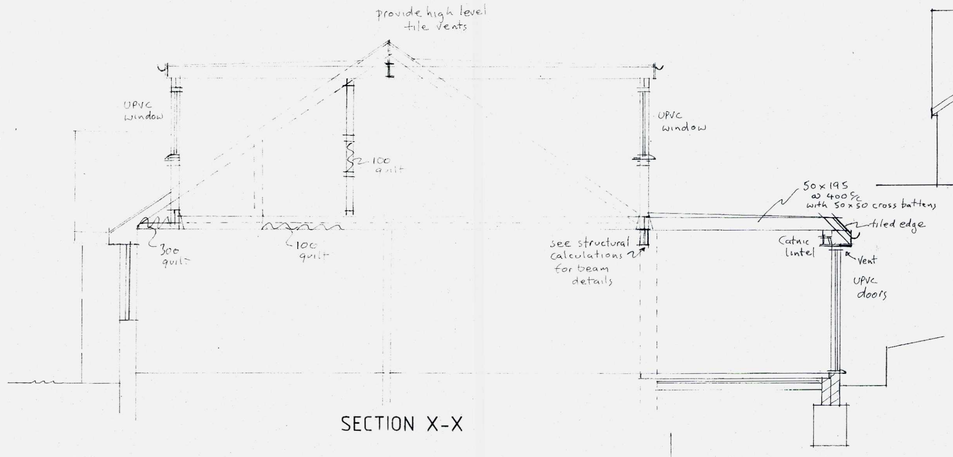
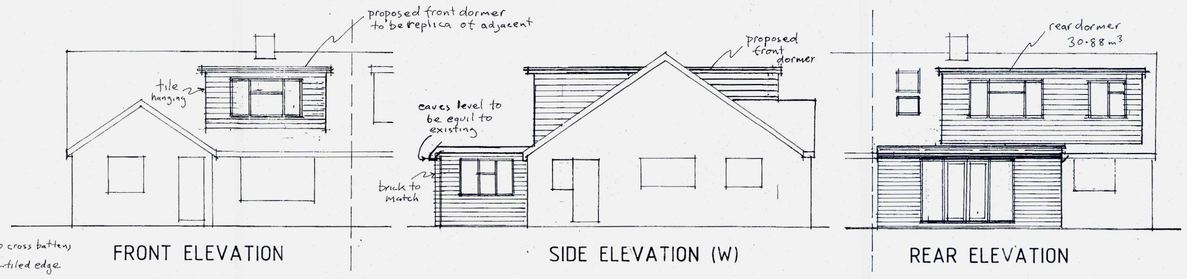


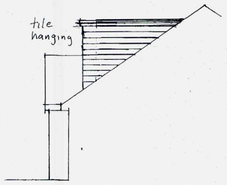

SECTION X-X



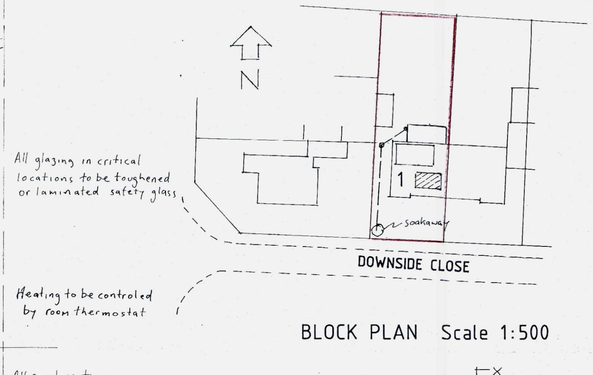

FRONT ELEVATION

SIDE ELEVATION (W)

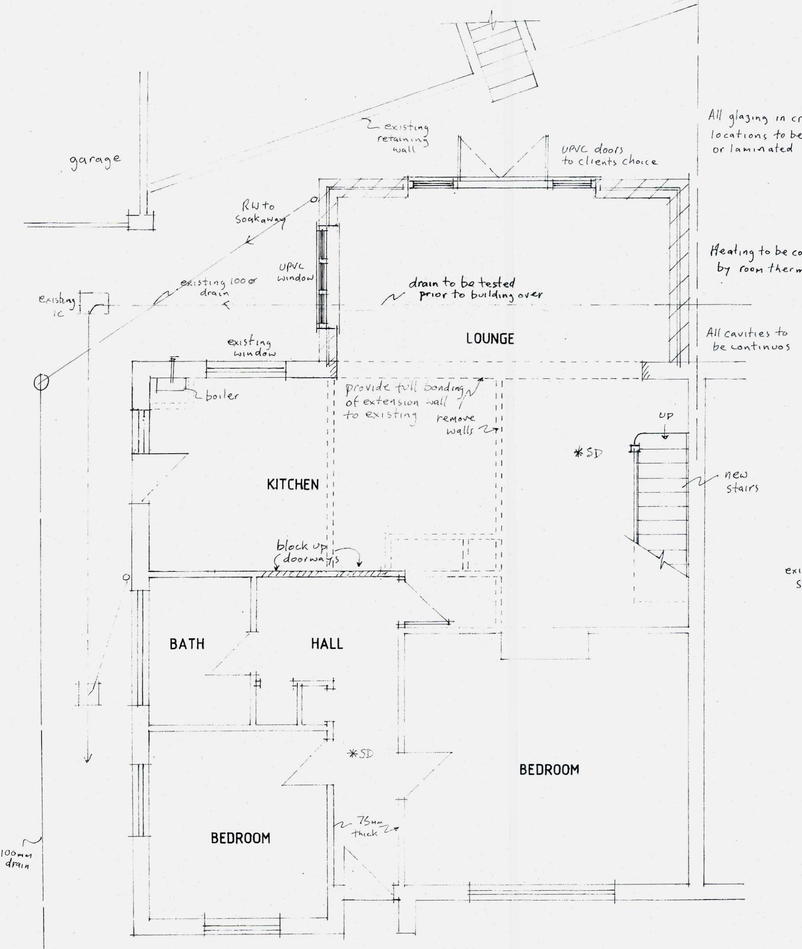
REAR ELEVATION



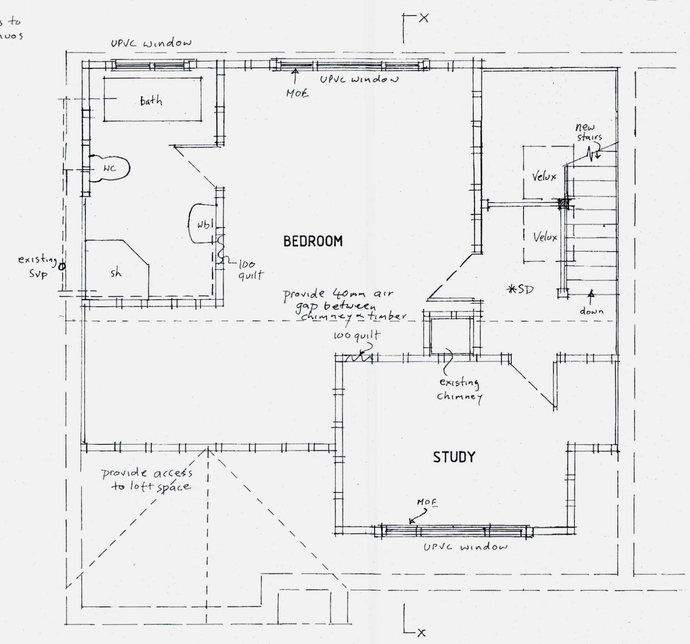

SIDE ELEVATION (E)




BLOCK PLAN Scale 1:500




GROUND FLOOR PLAN




FIRST FLOOR PLAN

## Water Supply

A wholesome supply of mains water (drinking quality) to be provided to: Drinking water taps, washbasins, baths, showers, bidets, sinks, and toilets. In accordance with the requirements of the Water Supply (water fittings) regulations 1999.
Suitable quality water must be supplied to flushing toilets (i.e. recycled water, grey or harvested, can be used instead of wholesome water).
The fittings to all appliances must help prevent unnecessary water consumption.
Heated wholesome water must be supplied to washbasins, bidets, baths, showers and sinks.
Hot water systems must be designed, constructed and installed to prevent both accidents during normal use and possible malfunctions.
Hot water storage vessels must be installed to prevent the temperature exceeding 100°C.
Ensure discharge from safety devices safely convey water to places that are visible.
Hot water storage systems should be designed and installed in accordance with BS 6700 + A1 2009 indirectly heated unvented (closed) storage water heater should comply with BS EN 12897: 2006.

## Electrical Works

All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so.
Prior to completion the council or approved inspector should be satisfied that Part P has been complied with. This may require an appropriate BS 7671 electrical installation certificate to be issued for the work by a person competent to do so.
Please be advised that problems may occur when fitting down lighters. The areas of concern relate to fire prevention, sound insulation and thermal insulation. Advice should be taken from the Building Control Officer to prevent incorrect installation.
Provide energy efficient light fittings to 75% of new locations with a luminous efficacy greater than 45 lamp lumens per circuit watt.

## Foundations

750 x 500mm trench fill foundations (1:2:4 concrete mix). All foundations to be minimum 1.0m below ground level with the exact depth to suit site conditions. New foundations to go down to invert level of any adjacent drains.
Foundation depth and floor construction may alter if tree roots are present within excavations, foundations should be taken down to 600mm below any root growth, external face of trenches to be lined with 1000 gauge polythene slip membrane, internal face of trenches lined with 25mm thick clayboard.

## External Walls

Cavity walls comprising matching 102.5mm facing brick outer leaf with 100mm cavity filled with 100mm Dritherm or Rockwool batts. Inner leaf 100mm Thermalite "Shield" or equal and approved blockwork min 3.6 N/mm². All walls constructed using 1:1:6 mortar or 1:5 masonry cement mortar. Finished with 12.5mm plasterboard on dabs and set finish internally. Providing a U value of 0.28W/m²K.
Horizontal strip polymer (hyload) damp proof course in each leaf of new walls min 150mm above adjacent ground level in external leaf. DPC to be lapped with existing wall DPC and with floor DPM. Ensure that at all openings no cold bridging occurs by using a proprietary system such as Thermabate Closers, or similar approved. FULL BOND NEW WALLS TO EXISTING.
~~New walls to be bonded to existing using British Board of Agrément certificated stainless steel wall profiles.~~
Blockwork below ground level to be Class A dense concrete or alternatively semi engineering brickwork. Cavities below ground level to be filled with lean mix concrete up to ground level and min 225mm below damp proof course.
Where drains pass through external walls provide 65mm deep x thickness of wall prestressed concrete lintel over in each leaf of wall. Minimum cover over drains to be 50mm clear. Mask opening with sheet material to prevent entry of fill or vermin.
All walls constructed with stainless steel double triangle wall ties built in at 450mm centres vertically and 750mm centres horizontally in staggered rows. Doubled up at corners and reveals. Cavities closed at eaves level with slate and to be continuous.
All external walls running parallel to roof to be restrained at roof level using 1000 x 30 x 5mm galvanised mild steel horizontal restraint straps built into walls at max 1200 centres and screw fixed to joists.
The building fabric will be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements and at the edges of elements such as those around window and door openings. Reasonable provision to be made to reduce unwanted air leakage through the new envelope parts.

## Ground Floors

Minimum 75mm screed reinforced with chicken wire (mix 1.3 or 4) on 100mm concrete ground floor slab (1.2.4 mix), on 80mm Celotex insulation laid over 1200 gauge polythene damp proof membrane on blinded hardcore minimum 100mm thick with 35mm Celotex perimeter insulation to slab. Provide additional 500g polythene between concrete slab and insulation. Where drain runs pass under new floor provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover, over length of drain. Where existing suspended timber floor air bricks are covered by new extension provide 100mm dia vent duct under new floor within hardcore to terminate at new 65 x 215mm air bricks built into new cavity wall. Ducts to be sleeved through cavity with cavity tray over. Providing a U value of 0.22W/m²K.

## Ventilation

All new windows to be double glazed timber or UPVC with 16mm air gap and a soft low-E coating, windows to provide openable ventilation area of not less than 1/20th of the floor area of the rooms which they serve, all fitted with a minimum 8000mm² trickle ventilator. Providing a U value of 1.6W/m²K.
Bath/Shower room to be provided with an extract fan capable of extracting not less than 15 litres per second, operated intermittently and ducted to external air. Mechanical vent to be ducted to the outside and to include cowl and all necessary weathering.
Velux rooflights to be fitted in accordance with manufacturers instructions, fitted with minimum 8000mm² trickle ventilator. Double up rafters either side. Providing a U value of 1.6W/m²K.
Kitchen to be provided with an extract fan capable of extracting not less than 60 litres per second (or 30 litres per second if fitted within a cooker hood) which may be operated intermittently and ducted to external air.

## Flat Roof

Flat roof covered with 3 layer built up felt to BS747 finished with 12.5mm white stone chippings bedded in bitumen. All felt work and detailing to be in accordance with CP144. 18mm WBP plywood decking on sw firrings to give min 1 in 40 fall and SC3 grade sw joists (size and centres as shown on plan) with 140mm Celotex Extra-R XR3000 insulation laid between joists (Ensure a 50mm air gap above insulation) and 25mm Celotex T-Break below joists. Fascia to match existing with soffit fitted with continuous 25mm vent and fly-proof screen. Roofing felt taken up under existing sarking felt minimum 450mm. Ceiling lined with 1000 gauge polythene and 12.5mm plasterboard with set finish. Providing a U value of 0.18 W/m²K.

## Beams and Lintels

Catnic or similar approved lintels to be used over door and window openings with min 150mm bearings. All voids within lintels to be filled with 150mm fibreglass. Steel beams to be encased to provide ½ hour fire protection with encasing in 2 layers of 12.5mm plasterboard fixed to wooden cradles with Gypsum plaster finish; wire bound with 1.6mm wire at 100mm centres.

## Surface Water Drainage

Rainwater to 100m half round PVC gutter laid to falls to the 65mm downpipes as shown to discharge to soakaway.
New soakaway min 5m away from any building to be 1m³ below invert of drain, to be hollow ring construction. Drain to be 100 dia UPVC lain to min fall of 1 in 40, bedded and surrounded in pea beach.

## Loft Conversion

New floor to be 22mm T & G flooring grade chipboard on joists with strutting at mid span as indicated on plan. All existing ceilings are of 12.5mm plasterboard and 5mm neat gypsum plaster and finish to provide the modified ½ hour fire resistance required.
The room shall have a window or rooflight at least 0.33m² and at least 750mm high and 450mm wide when open located not more than 1100mm above the floor (as indicated).
Internal stud partition walls as shown to be constructed of minimum 100 x 50mm studding at 400mm centres with sw base and head plates and cross noggings at maximum 1200mm centres. Studding faced both sides with 12.5mm plasterboard finished with set. Walls supported off doubled up floor joists where running parallel with floor joists.
Dwarf stud partition to be of minimum 100 x 50mm studding at 400mm centres with sw base and head and cross nogged. Install 80mm Celotex tuff-R GA3000 insulation between studwork (leaving a 30mm cavity). Internally fix 12mm Celotex T-Break TB3000 over studs with 1000 gauge polythene vapour barrier and 12.5mm plasterboard with set finish. Providing a U value of 0.28 W/m²K.
All skeilings to be insulated with 75mm Celotex tuff-R GA3000 insulation between rafters (Use battens to underside of rafters in order that a 50mm airflow is achieved over the insulation). Fix Thinsulex Multi-foil insulation system fixed to underside of rafters, all joints foil taped. Minimum 25mm thick cross battens at 400mm centres. Ceiling lined with 1000 gauge polythene and 12.5mm plasterboard with set finish. Providing a U value of 0.18 W/m²K. (This construction method has LABC system approval)
Ridge or high level tile ventilators to be installed to assist cross ventilation of roof space. To be equal to a continuous strip of 5mm wide.
Provide ventilation to the existing soffit equivalent to a 25mm continous ventilation strip fitted with a fly screen.
Access doors into roofspaces should be backed with 80mm Celotex insulation and be fitted with draught strips.
The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements,at the joints between elements and at the edges of the elements such as those around window and door openings. Reasonable provision should also be made to reduce unwanted air leakage through the new envelope parts.

## Dormer Walls

Dormers to be constructed of 100 x 50mm studding at 400mm centres with 100 x 100mm posts at corners and window jambs. Studding to be lined externally with plain tile hanging of colour to match main roof on 38 x 19mm battens and breather paper (Sisalkraft) on 12.5mm sheathing ply. Install 70mm Celotex tuff-R GA3000 insulation between studwork (leaving a 30mm cavity). Internally fix 12mm Celotex T-Break TB3000 over studs with 1000 gauge polythene vapour barrier and 12.5mm plasterboard with set finish. Providing a U value of 0.28 W/m²K.Rafters to be doubled up under dormer cheeks. Provide code 4 lead soakers and flashings as necessary. Dormer cheeks within 1.0m of the boundary to be lined externally with 12.5mm Superlux to achieve ½ hour fire resistance from both sides.
DORMERS TO BE SET BACK A MINIMUM OF 200mm FROM EAVES. SIDE FACING WINDOWS TO HAVE OBSCURE GLAZING AND ANY OPENINGS IN THE WINDOWS TO BE A MINIMUM OF 1700mm ABOVE FLOOR LEVEL.

## Foul Water Drainage

All fittings to be provided with trapped waste pipes as follows:
Shower - 40mm diameter
Wash hand basin - 32mm diameter
WC - 100mm diameter
All traps to be 75mm deep seal & all waste pipes are to be fitted with rodding access on tight bends. Common wastes or runs in excess of 1.7m long are to be fitted with anti-syphonic traps.
Extend existing SVP to terminate 900mm above any window opening within 3.0m and fit with PVC cage.

## Staircase

Standard timber staircase with 220mm maximum rise, 220mm minimum going, 800mm width and layout as shown on plan. Pitch 42 degrees maximum. Openings in the vertical balustrade not to exceed 99mm. (i.e. a 100mm sphere cannot pass through any openings in the guarding) Minimum handrail height for stairs and landing to be 900mm. Handrail to be continuous top to bottom of flight, with no finger traps. Minimum headroom over pitch of staircase to be 2000mm, measured vertically above the pitch line. Minimum going at newel posts to be 50mm. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO MANUFACTURE.

## Smoke Detectors

At least one number mains operated self-contained smoke alarm to BS 5446: Part 1 to be installed in the circulation space of each storey. All smoke alarms within each dwelling to be inter-connected, be permanently wired to a separate fused circuit at the distribution boards in accordance with IEE Regulations. All smoke detectors to have an alternative battery power supply. They may operate at a low voltage via a mains transformer. Smoke alarms must be installed within 7m of the living room and kitchen door, within 3m of all bedroom doors and within 15m of each other in corridors or landings. If ceiling mounted, smoke alarms should not be installed within 300mm of a light fitting. If wall mounted, smoke alarm should not be over radiator and should be fixed elsewhere within 150 and 300mm of the ceiling.

**THIS DRAWING TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS CALCULATIONS AND RECOMMENDATIONS**

**All lengths of proposed beams to be measured on site prior to ordering, to verify structural engineer's dimensions.**

**Careful inspection is to be carried out prior to the removal of any structural elements to ensure proper and adequate support is provided and maintained by new works.**

**All building work is to be carried out in accordance with all current building regs and codes of practice in force at this time.**

**Any parts of structure covered over or inaccessible have not been inspected and no responsibility is accepted for these areas including underground.**

**No work to encroach over the boundary of the neighbours property.**

**All electrics, heating, plumbing and decorations to be altered/extended all to client's choice.**

**These construction notes are for the purposes of Building Regulation approval only and do not represent a detailed specification.**

**ALL FOUNDATIONS TAKEN ADDITIONAL LOADS ARE TO BE EXPOSED AND CHECKED FOR ADEQUACY AND SUITABILITY FOR GROUND CONDITIONS PRIOR TO COMMENCEMENT OF WORKS.**

**All existing lintels taking additional loads are to be exposed and checked for adequacy on commencement of work and replaced if necessary.**

**THE PROPERTY OWNER IS REMINDED OF THE REQUIREMENT TO SERVE A PARTY STRUCTURE NOTICE ON ANY ADJOINING OWNER SHOULD THEY NEED TO DO SO UNDER THE REQUIREMENTS OF THE PARTY WALL ACT 1996.**

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RICS

Client: Mr.J.SMART

Job Title: 1 DOWNSIDE CLOSE SHOREHAM BY SEA

ADUR & WORTHING PLANNING SERVICES
PLAN: AWDM/1466/13
DATE VALID: 2013

Drawing Title: REAR EXTENSION AND LOFT CONVERSION

Scale: 1:50 & 1:100

Date: Feb. 2012

Drawn by: JW

Drg No. JW/12/014

Rev. A