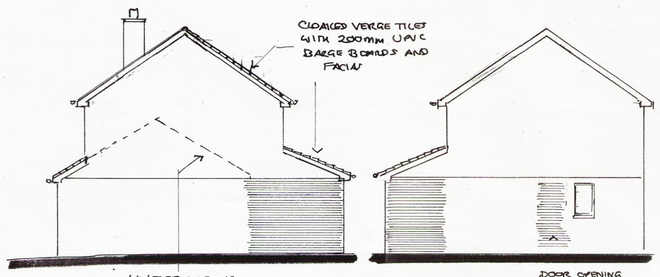
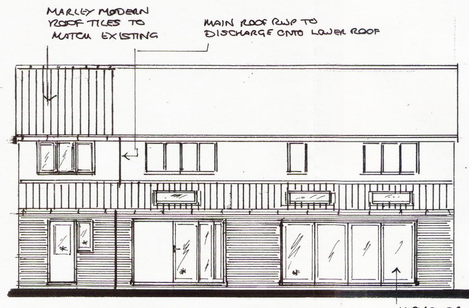
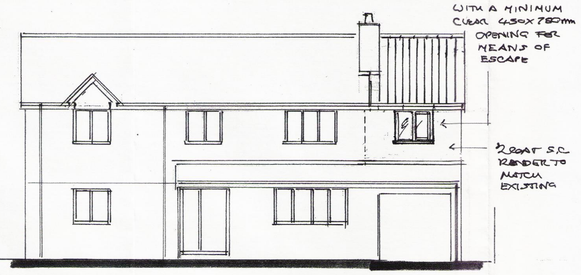
SIDE ELEVATIONS



REAR ELEVATION

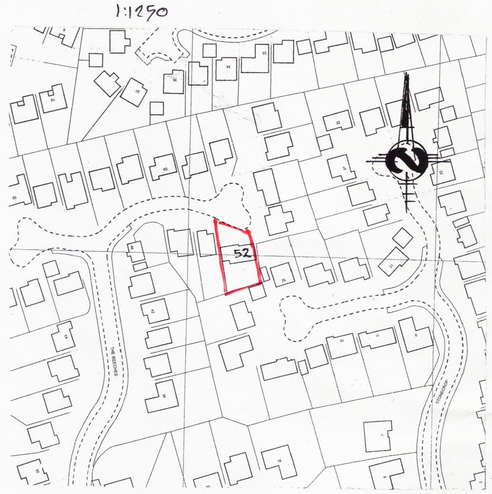


FRONT ELEVATION



LOCATION PLAN

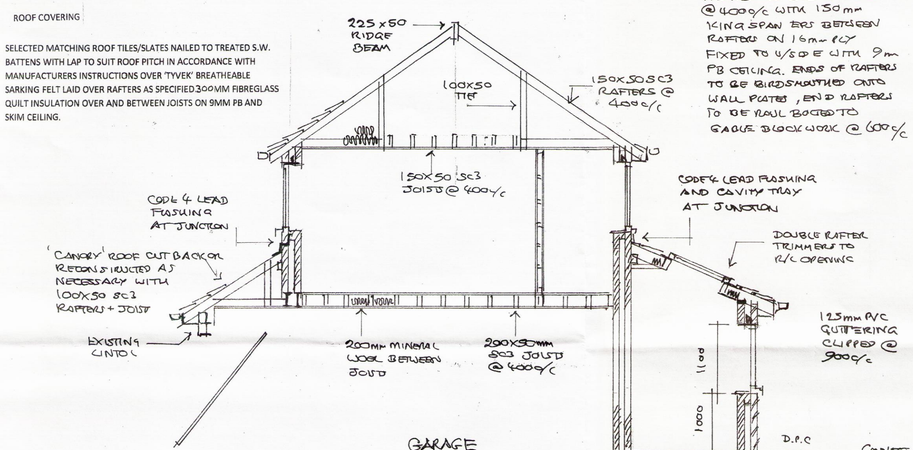
1:1250



SECTION

ROOF COVERING

SELECTED MATCHING ROOF TILES/SLATES NAILED TO TREATED S.W. BATTENS WITH LAP TO SUIT ROOF PITCH IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS OVER 'TYVEK' BREATHEABLE SARKING FELT LAID OVER RAFTERS AS SPECIFIED 300MM FIBREGLASS QUILT INSULATION OVER AND BETWEEN JOISTS ON 9MM PB AND SKIM CEILING.



LEAN TO ROOF:
175x50mm SC3 RAFTERS @ 400c/c WITH 150mm 'KING SPAN' BRS BETWEEN RAFTERS ON 16mm P/C FIXED TO U/SIDE WITH 9mm PB CEILING. ENDS OF RAFTERS TO BE BIRDSMOUTHED ONTO WALL PLATES, END RAFTERS TO BE NAIL BOLTED TO GABLE BLOCKWORK @ 600c/c

WALL CONSTRUCTION

TWO COAT SAND CEMENT RENDER TO MATCH EXISTING ON 100MM CONCRETE BLOCKWORK OR SELECTED FACING BRICK OUTER LEAF 100MM CAVITY WITH ROCKWOOL INSULATION BATS FULL FILL 100MM CELCON SOLAR BLOCKWORK. INNER LEAF WITH TWO COAT PLASTER FINISH TO GIVE A MAXIMUM O.2.8 'U' VALUE. STAINLESS STEEL CAVITY TIES TO BE PROVIDED AT 450+750MM CENTRES AND AT 300MM CENTRES AROUND ALL OPENINGS. INSULATED 'THERMABATE' OR SIMILAR CAVITY CLOSERS INSULATED CATNIC OR I.G. PROPRIETY GALV. STEEL LINTOLS TO BE PROVIDED OVER ALL CAVITY WALL OPENINGS WITH A MINIMUM 150MM END BEARING. TIMBER STUD PARTITIONS 75X50MM STUDDING WITH MINERAL WOOL INFILL AND 12MM PB AND SKIM BOTH SIDES.

FIRST FLOOR CONSTRUCTION

MOISTURE RESISTANT 21MM T&G BOARDING NAILED TO FLOOR JOISTS AS SPECIFIED WITH STRUTTING AT ⅓rd SPAN 30X5MM GALV. M.S.RESTRAINT STAPS TO BE PROVIDED AT 1.8M CENTRES TO JOISTS PARALLEL TO WALLS FIXED TO AT LEAST 3No. JOISTS DOUBLE JOISTS TO BE BOLTED TOGETHER AT 600 C/C PLACED UNDER PARTITIONS FOR SUPPORT. 12MM PLASTERBOARD AND SKIM CEILING.

GROUND FLOOR

100MM CONCRETE SLAB WITH SELF LEVELLING SCREED AND FINISH TO CLIENT'S CHOICE ON 120MM 'CELOTEX' ON 1200 G VISQUEEN DPM ON 50MM SAND BLINDING OVER 150MM WELL CONSOLIDATED BRICK HARDCORE. INSULATION BOARD TO BE TURNED UP AT EDGE OF SLAB. D.P.C. AND D.P.M. TO BE LAPPED AND BONDED.

WINDOWS

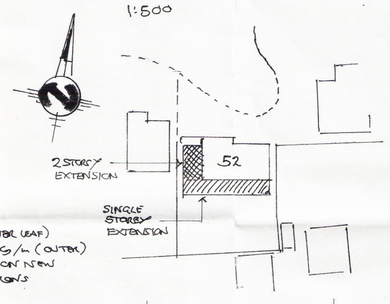
ALL NEW WINDOWS AND ROOF LIGHTS IN U.P.V.C. OR H.W. FRAMES TO HAVE 20MM SEALED DOUBLE GLAZED UNITS INCORPORATING LOW EMISSIVITY 'K' GLASS TO ACHIEVE A MAXIMUM 1.6 W/M K 'U' VALUE.

VENTILATION

ALL HABITABLE ROOMS TO HAVE AT LEAST 8000MM² BACKGROUND VENTILATION PROVIDED THROUGH TRICKLE VENTILATORS BUILT INTO WINDOW FRAMES OR 2NO 225 X 150MM AIR BRICKS WITH LOUVRED CONTROLLABLE PLASTER VENTS. AT LEAST 4000MM² BACKGROUND VENTILATION TO BE PROVIDED TO KITCHENS, BATHROOMS AND UTILITY ROOMS. WINDOW FRAMES TO INCORPORATE OPENING VENTS EQUIVALENT TO AT LEAST 5% OF THE FLOOR AREA OF THE ROOM SERVED.

SITE PLAN

1:500



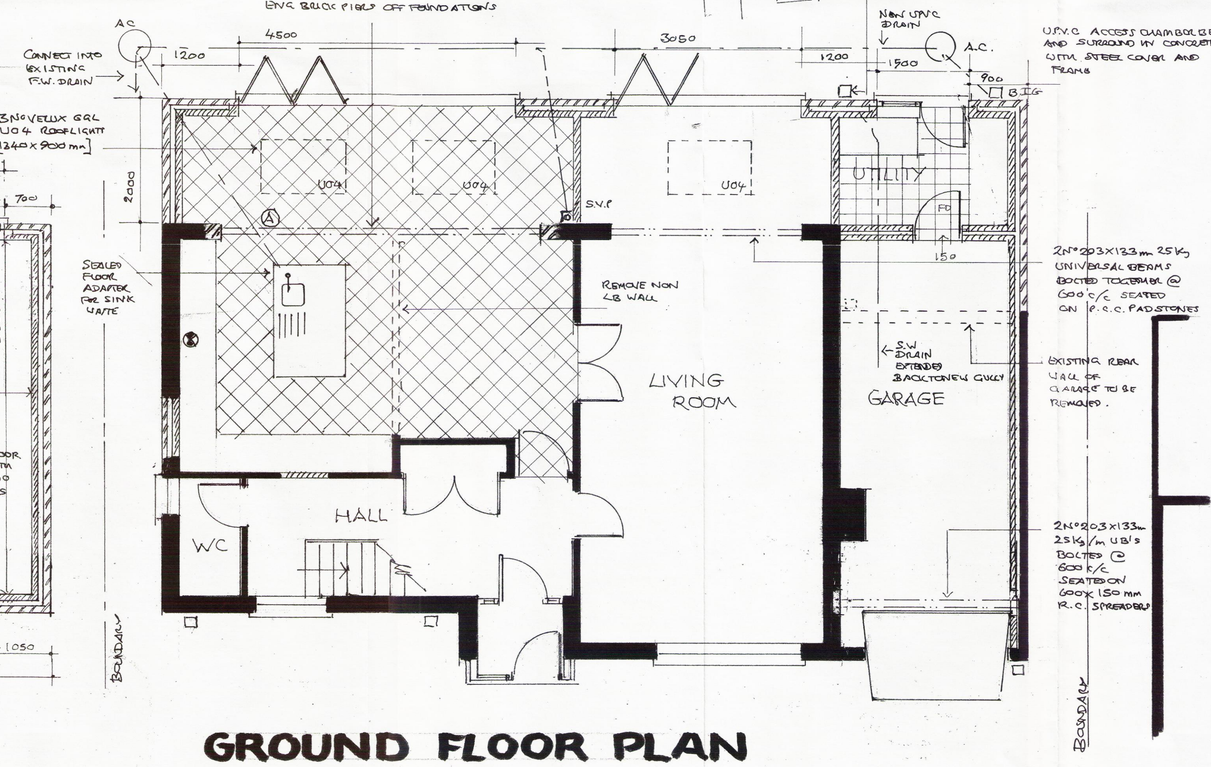
STEEL CHECK

(A) 254x146mm 43Kg/m U.B.
SPAN 5300

LOADS
BLKWK : 2.5 x 5.3 x 2.2 = 29.15
FLOOR : 2.0 x 5.3 x 2.5 = 26.5
ROOF : 3.2 x 5.2 x 2.0 = 33.92
W 89.57

BM $W\frac{L}{8}$ = 59.34 KNm
Zreq $\frac{M}{pbs}$ = 360 cm³ OK
δp $\frac{L}{360}$ = 14.7mm
δa $\frac{5WL^3}{384EI} = \frac{5 \times 10 \times 5.3^3}{384\,EI} = \frac{174.5}{EI}$ = 12.6mm OK

1No 254x146mm 43Kg/m (INNER LEAF) BOLTED TO 1No 254x102mm 28Kg/m (OUTER) SEATED ON P.C.C. PADSTONES ON NEW 1½ BRICK PIERS OFF FOUNDATIONS



MECHANICAL VENTILATION

ALL BATHROOMS AND SHOWER ROOMS TO BE FITTED WITH A MECHANICAL EXTRACT FAN CAPABLE OF AT LEAST 15 LITRES/SECOND EXTRACT RATE. KITCHENS TO HAVE EITHER A MECHANICAL EXTRACT FAN CAPABLE OF 60 LITRES/SECOND OR A COOKER HOOD CAPABLE OF A 30L/s. MECHANICAL EXTRACT FANS SERVING WINDOWLESS BATHROOM/SHOWER ROOMS/W.C. CUBICLES TO PROVIDE AT LEAST 3 AIR CHANGES PER HOUR WITH A 15 MINUTE OVER RUN FACILITY.

DRAINAGE

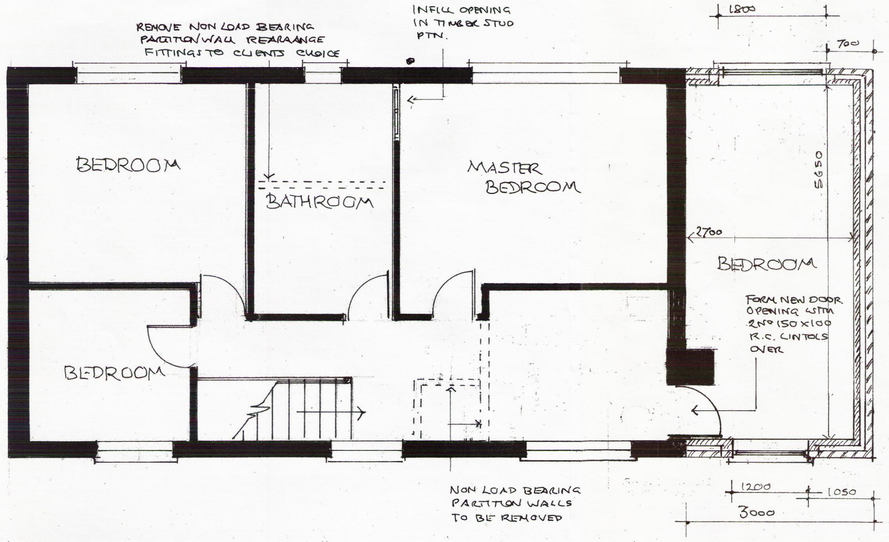
ALL NEW DRAINS TO BE LAID USING 100MM DIAMETER HEPSLEVE OR U.P.V.C. PIPES AT 1:40 MINIMUM SELF-CLEANSING GRADIENT. DRAINS UNDER BUILDING AND WITHIN 1M OF FOUNDATIONS TO BE ENCASED IN CONCRETE SURROUND. DRAINS PASSING THROUGH FOUNDATIONS TO BE BRIDGED OVER WITH P.C.C. LINTOLS AND ROCKER PIPE USED EITHER SIDE OF WALL. 100MM DIAMETER S.V.P.'s TO RECEIVE UPPER FLOOR FITTINGS WITH WIRE BIRD CAGE TERMINAL AT LEAST 900MM ABOVE THE HIGHEST WINDOW VENT OPENING AND ABOVE ROOF LEVEL. ALL NEW SANITARY FITTINGS TO HAVE ANTI VAC TRAPS WITH WASTES CONNECTED SEPARATELY INTO SOIL STACKS ALL WASTES TO BE MADE ACCESSIBLE.

GENERAL NOTES

ALL DIMENSIONS INCLUDING ROOF PITCHES TO BE CHECKED BY CONTRACTOR BEFORE WORK COMMENCES. ALL WORK TO COMPLY WITH CURRENT BUILDING REGULATIONS AND CARRIED OUT TO THE COMPLETE SATISFACTION OF THE DISTRICT B.C.O. ALL TIMBER TO BE TREATED WITH PRESERVATIVE. ALL NEW STELLWORK TO BE ENCASED IN 12M GYPSUM 'FIRELINE' BOARD FOR 30 MINUTES FIRE PROTECTION. ALL GALV. LINTOLS TO BE INSULATED AND ENCASED WITH 12MM PLASTERBOARD AND SKIM FOR 30 MINUTES FIRE PROTECTION. ALL ELECTRICAL WORK TO BE UNDERTAKEN BY NICEIC APPROVED CONTRACTOR WITH AN INSTALLATION CERTIFICATE TO BE PROVIDED ON COMPLETION. ALL NEW RADIATORS TO BE FITTED WITH THERMOSTATIC VALVES AND C.H. BOILERS TO BE REPLACED IF NECESSARY WITH CONDENSING TYPE BOILERS AND INSTALLED BY A CORGI REGISTERED CONTRACTOR.

FOUNDATIONS

TWO LEAVES BRICKWORK BELOW D.P.C. LEVEL WITH CONCRETE CAVITY FILL UP TO 225MM BELOW D.P.C. LEVEL STRIP CONCRETE FOOTINGS MINIMUM 600MM X 200MM THICK AT LEAST 1000MM DEEP BEARING ONO FIRM CLAY SUB STRATA. OVERALL SIZE AND DEPTH TO SUIT GROUND CONDITIONS IN AGREEMENT WITH THE B.C.O./A.I.



FIRST FLOOR PLAN

GROUND FLOOR PLAN

APPROVED PLANS
REC'D BY LFA DATE 23/11/16

CLIENT	MR. L. JEFFERIES
SCHEME	SINGLE STOREY EXTENSION AT REAR AND TWO STOREY EXTENSION AT SIDE
ADDRESS	52 THE BEECHES CALDERSTONES LIVERPOOL

DRAWING NUMBER			REV B
DATE	DECEMBER 2015	DRAWN	
SCALES	1:50 1:100	CHECKED	