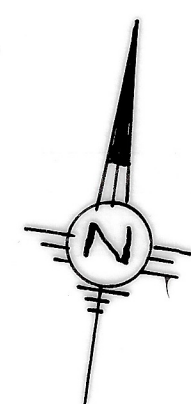
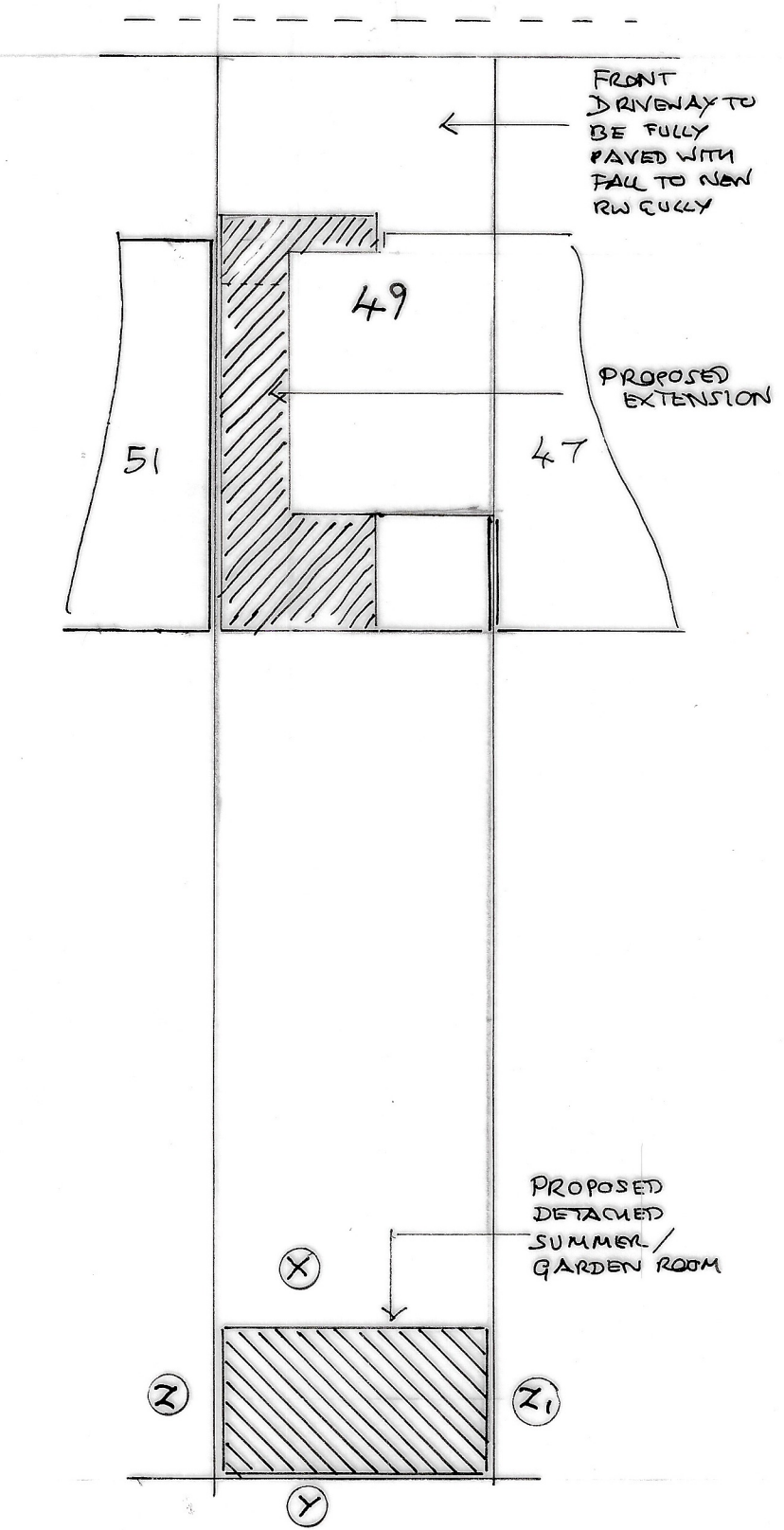
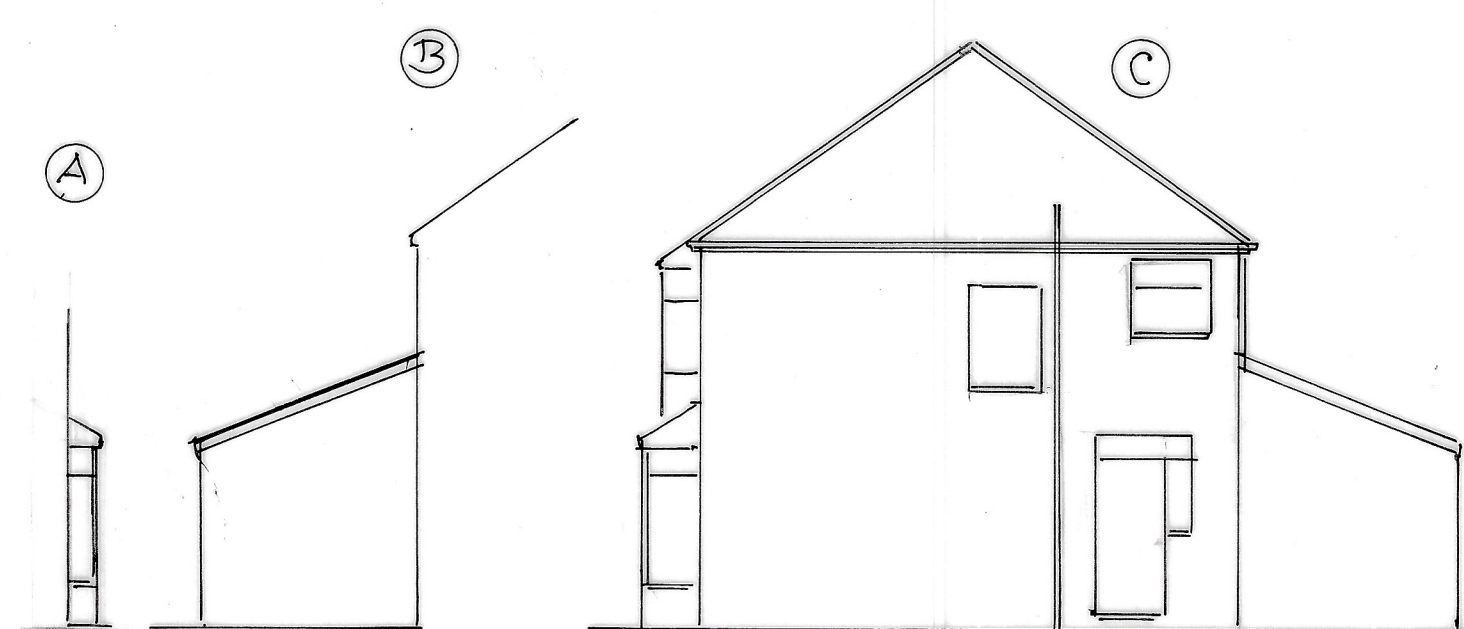


SITE PLAN 1:200

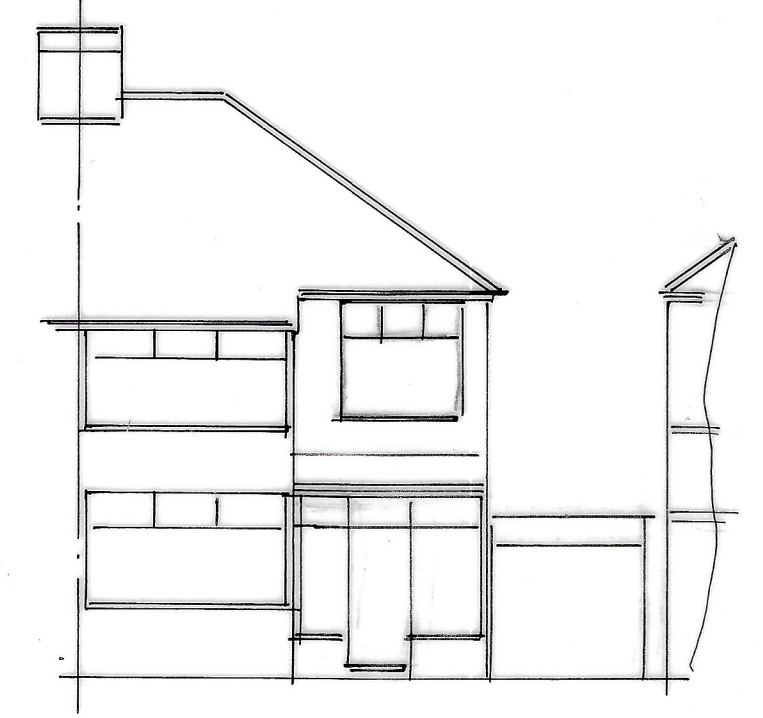
FAIRFIELD AVENUE



SIDE ELEVATIONS 1:100



FRONT ELEVATION 1:100



REAR ELEVATION 1:100



EXISTING

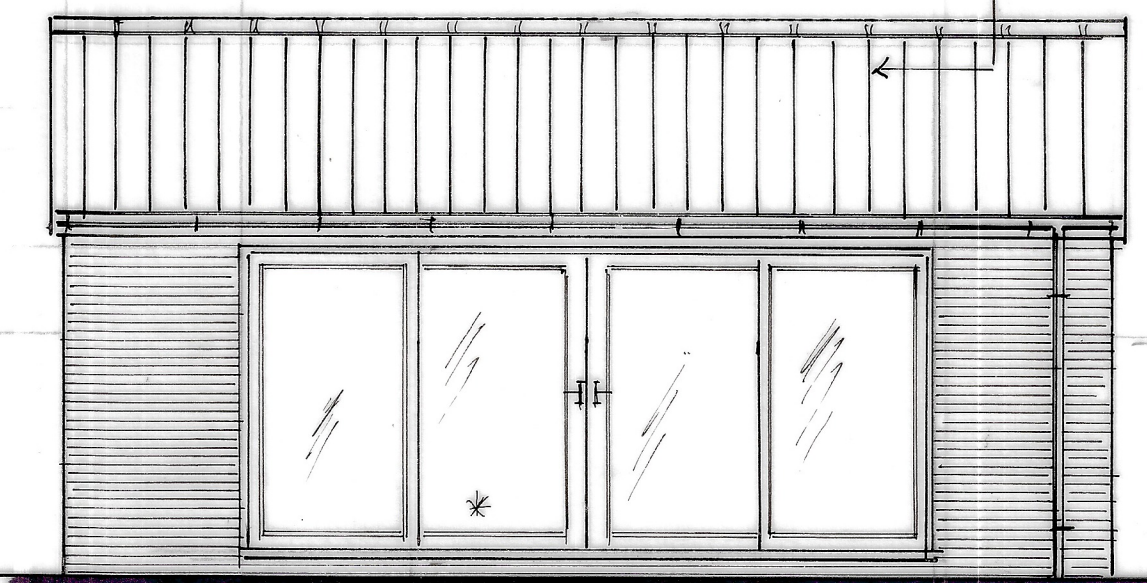
WINDOWS
ALL NEW WINDOWS AND ROOF LIGHTS IN U.P.V.C OR H.M. FRAMES TO HAVE 20MM SEALED DOUBLE GLAZED UNITS INCORPORATING LOW EMISSIVITY 'K' GLASS TO ACHIEVE A MAXIMUM 1.4W/M² K VALUE.

VENTILATION
ALL HABITABLE ROOMS TO HAVE AT LEAST 8000MM² BACKGROUND VENTILATION PROVIDED THROUGH TRICKLE VENTILATIONS BUILT INTO WINDOW FRAMES OR 2 NO 225 X 150MM AIR BRICKS WITH LOUVERED 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.

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 CONCRETE BLOCKWORK. INNER LEAF WITH TWO COAT PLASTER FINISH TO GIVE A MAXIMUM 0.28 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 WITH INSULATED CATNIO OR I.G. PROPRIETARY GALV. STEEL LINTOLS TO BE PROVIDED OVER ALL CAVITY WALL OPENINGS WITH A MINIMUM 150MM END BEARING. TIMBER STUD PARTITIONS 75 X 50MM STUDDING WITH MINERAL WOOL INFILL AND 12MM PB AND SKIM BOTH SIDES.

MAINTAIN MODERN OR SIMILAR ROOF TILES

FRONT ELEVATION X 1:50

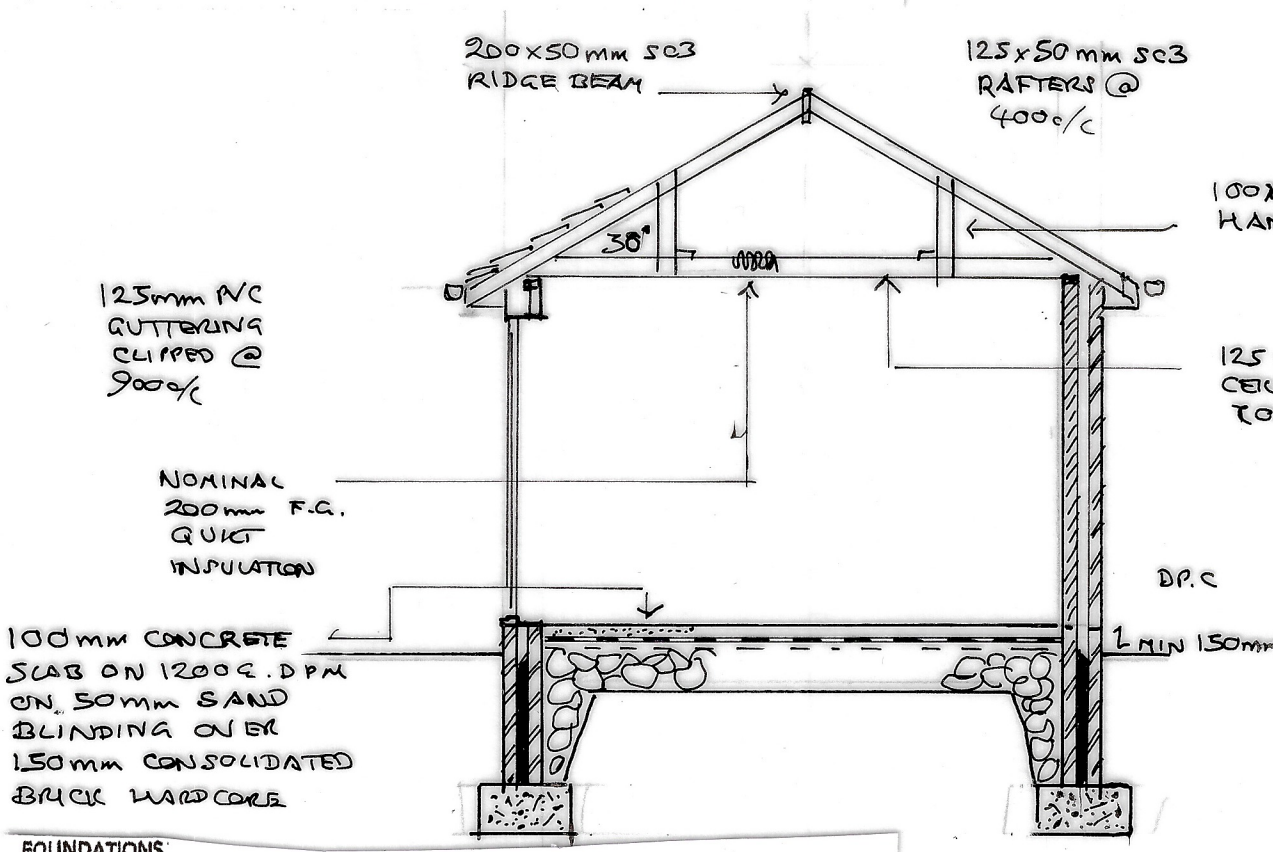


REAR ELEVATION Y 1:50

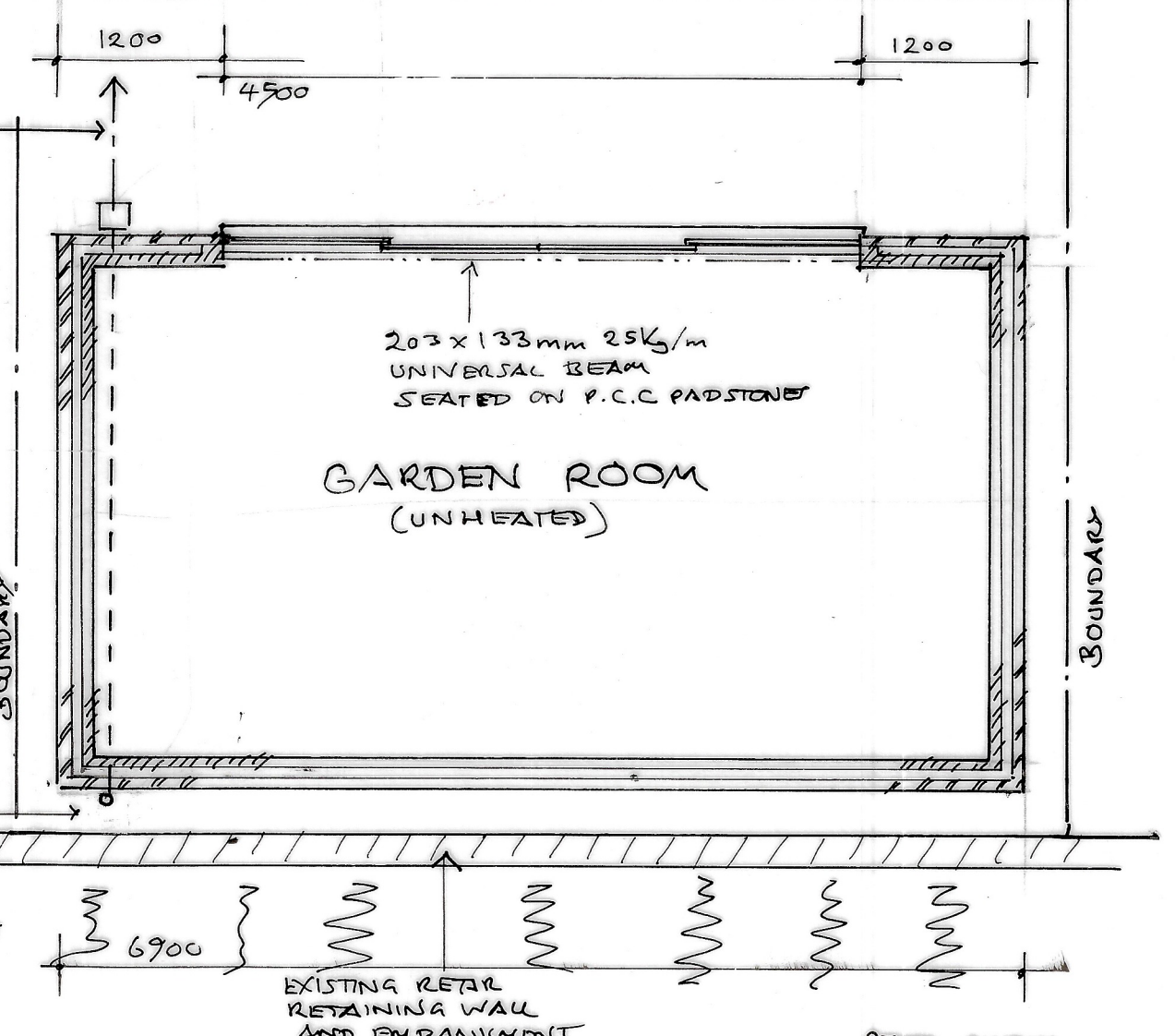


BRICKWORK TO CLIENT'S CHOICE

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' BREATHABLE SARKING FELT LAID OVER RAFTERS AS SPECIFIED. 300MM FIBREGLASS QUILT INSULATION OVER AND BETWEEN JOISTS ON 9MM PB AND SKIM CEILING.

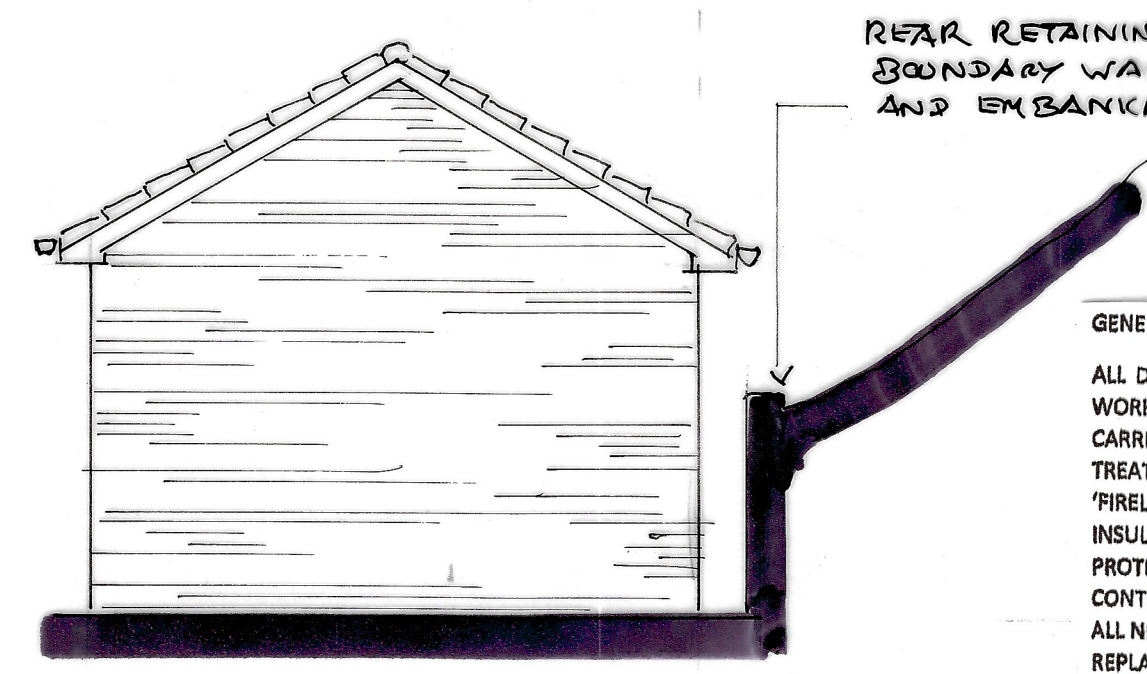


ACCESS GULLY TO EXISTING DRAINAGE SYSTEM BY HOUSE



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 ON FIRM CLAY SUBSTRATA, OVERALL SIZE AND DEPTH TO SUIT GROUND CONDITIONS IN AGREEMENT WITH THE B.C.O./A.I.

SIDE ELEVATIONS Z & Z1 1:50 (HANDED)



REAR RETAINING BOUNDARY WALL AND EMBANKMENT

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 STEELWORK 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 SKIMFOR 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. TOUGHENED OR LAMINATED SAFETY GLASS TO BE USED IN ALL CRITICAL LOCATIONS.*

DRAINAGE
ALL NEW DRAINS TO BE LAID USING 100MM DIAMETER HERPSELE OR U.P.V.C. PIPES AT 1:40 MINIMUM SELF-CLEANING 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.

FLOOR PLAN 1:50

STEEL CHECK
203x133mm 2516/m UB SPAN 4700
LOADS ROOF: 2.0 x 4.7 x 2.0 = 18.8 kN (W)
BM $W/8 + P/4 = 11.05 \text{ kN}$
 $Z_{yd} M/pbc = 67 \text{ cm}^3$
 $S_f \sqrt{360} = 13 \text{ mm}$
 $S_a \sqrt{360} = 25.4 = 5 \text{ mm}$

STEEL CHECK:
① 178x102 RSJ SPAN 2000
LOADS FLOOR: 0.9 x 2.0 x 2.5 = 4.5
FLOOR: 1.6 x 2.0 x 2.5 = 8.0
WALL: 2.4 x 2.0 x 1.0 = 4.8
ROOF: 2.0 x 2.5 x 2.0 = 10.0
BM $W/8 = 6.825 \text{ kN}$ $W/27.3 \text{ kN}$
 $Z_{yd} M/pbc = 41 \text{ cm}^3$ $S_f \sqrt{360} = 5.5 \text{ mm}$
 $S_a \sqrt{360} = 2.84 = 1 \text{ mm}$

N/A → ② 305x127mm 4816/m UB SPAN 6600
LOADS BULK: 2.6 x 6.6 x 2.2 = 37.75
ROOF: 1.2 x 6.6 x 2.0 = 15.84
W 53.59 kN
POINT LOAD FROM D + RSJ = 13.7 + 1.5
 $P = 20.55 \text{ kN}$
BM $W/8 + P/4 = 44.21 + 33.9$
 $Z_{yd} M/pbc = 78.11 \text{ kNm}$ $S_f \sqrt{360} = 18.3$
 $S_a \sqrt{360} = 200.6 + 123.1$
 $S_f \sqrt{360} = 323.7 = 16.2 \text{ mm}$

③ 203x133mm 2516/m UB SPAN 3000
LOADS BULK: 2.6 x 3.0 x 2.2 = 17.16
ROOF: 1.2 x 3.0 x 2.0 = 7.2
W 24.36 kN
BM $W/8 = 9.135 \text{ kN}$ $W/24.36 \text{ kN}$
 $Z_{yd} M/pbc = 55 \text{ cm}^3$ $S_f \sqrt{360} = 8.3 \text{ mm}$
 $S_a \sqrt{360} = 8.36 = 1.7 \text{ mm}$
LOAD ON BOTH UB: $W_f = W + BULK = 41.52 \text{ kN}$

④ 305x146mm 5416/m UB SPAN 6600
LOADS BULK: 2.6 x 6.6 x 2.2 = 37.75
FLOOR: 1.5 x 6.6 x 2.5 = 24.75
W 62.5 kN
POINT LOAD FROM UB: $P = 20.76 \text{ kN}$
BM $W/8 + P/4 = 51.56 + 34.25$
 $Z_{yd} M/pbc = 85.8 \text{ kNm}$ $S_f \sqrt{360} = 11.1 \text{ mm}$
 $S_a \sqrt{360} = 233.96 + 124.34 = 358.3$
 $S_f \sqrt{360} = 14.5 \text{ mm}$

⑤ 254x146mm 4316/m UB SPAN 4000
LOADS BULK: 2.6 x 4.0 x 4.5 = 46.8
ROOF: 1.5 x 4.0 x 2.0 = 12.0
FLOOR: 1.5 x 4.0 x 2.5 = 15.0
W 73.8 kN
POINT LOAD FROM F: $P = 20.76 \text{ kN}$
BM $W/8 + P/4 = 36.7 + 20.76$
 $Z_{yd} M/pbc = 57.46 \text{ kNm}$ $S_f \sqrt{360} = 11.1 \text{ mm}$
 $S_a \sqrt{360} = 61.5 + 27.7 = 89.2$
 $S_f \sqrt{360} = 6.4 \text{ mm}$

CLIENT
MR & MRS. J. FITZPATRICK

SCHEME
TWO STOREY EXTENSION AT SIDE AND DETACHED OUTBUILDING AT REAR

ADDRESS
49 FAIRFIELD AVENUE
HUTTON
L36 4JE

DRAWING TITLE
EXISTING + OUTBUILDING DET

NUMBER
082

REVISION
1:50
1:100

DATE
AUGUST 2022

SCALES
1:50
1:100

