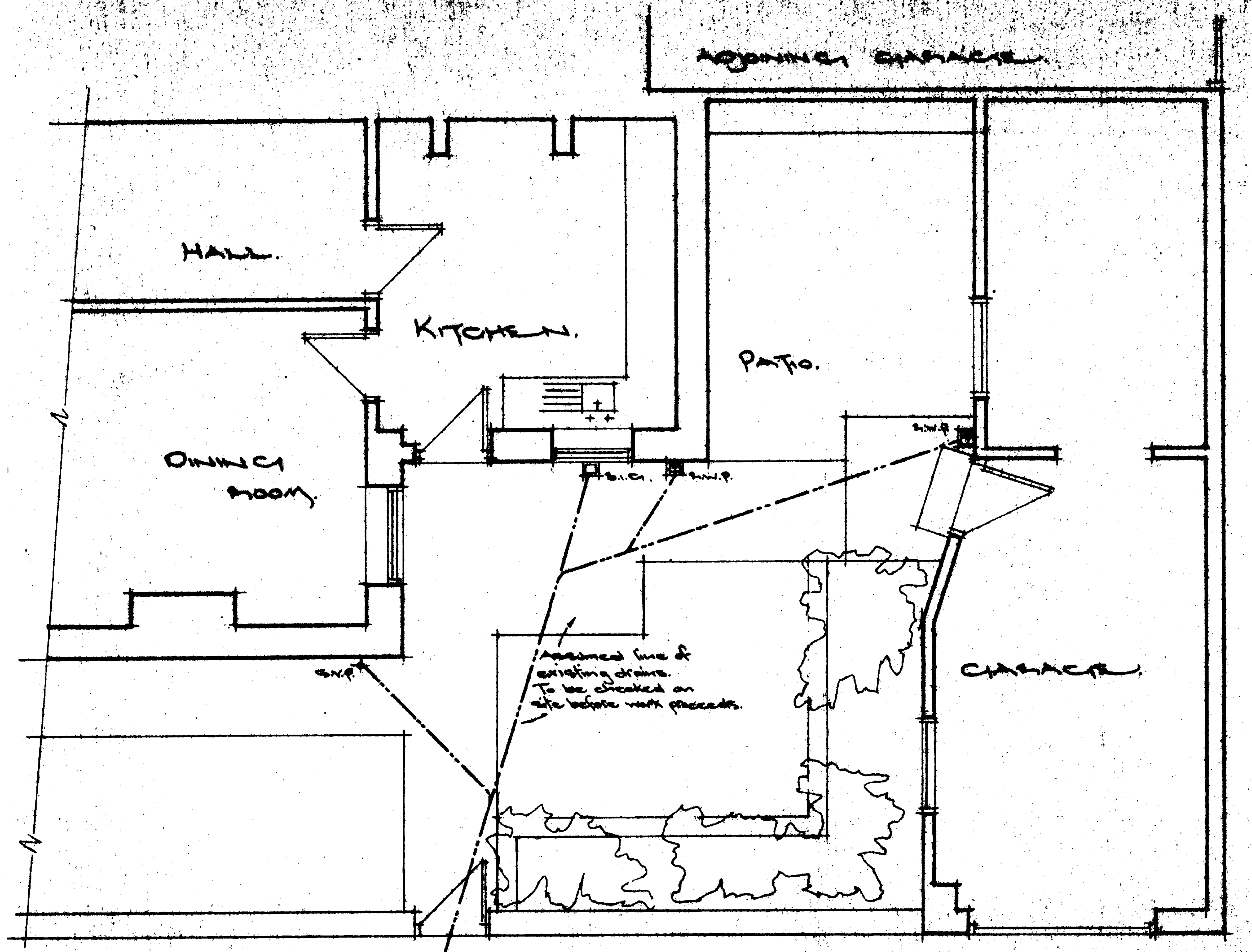
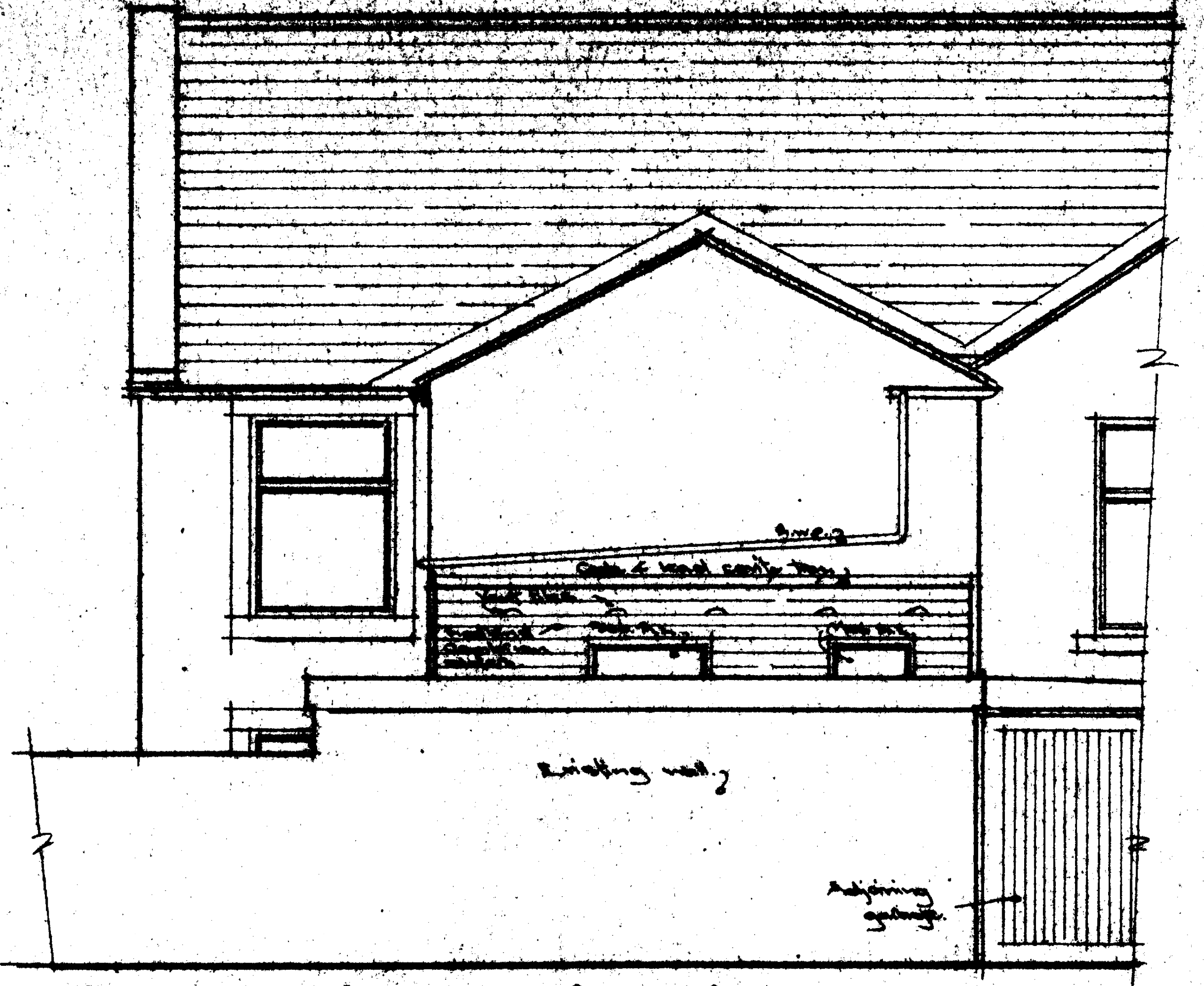

ADJOINING GARAGE
HALL
KITCHEN
PATIO
DINING ROOM
GARAGE
Assumed line of existing drains. To be checked on site before work proceeds.

Existing plan. Scale : 1/50.



Proposed rear elevation.

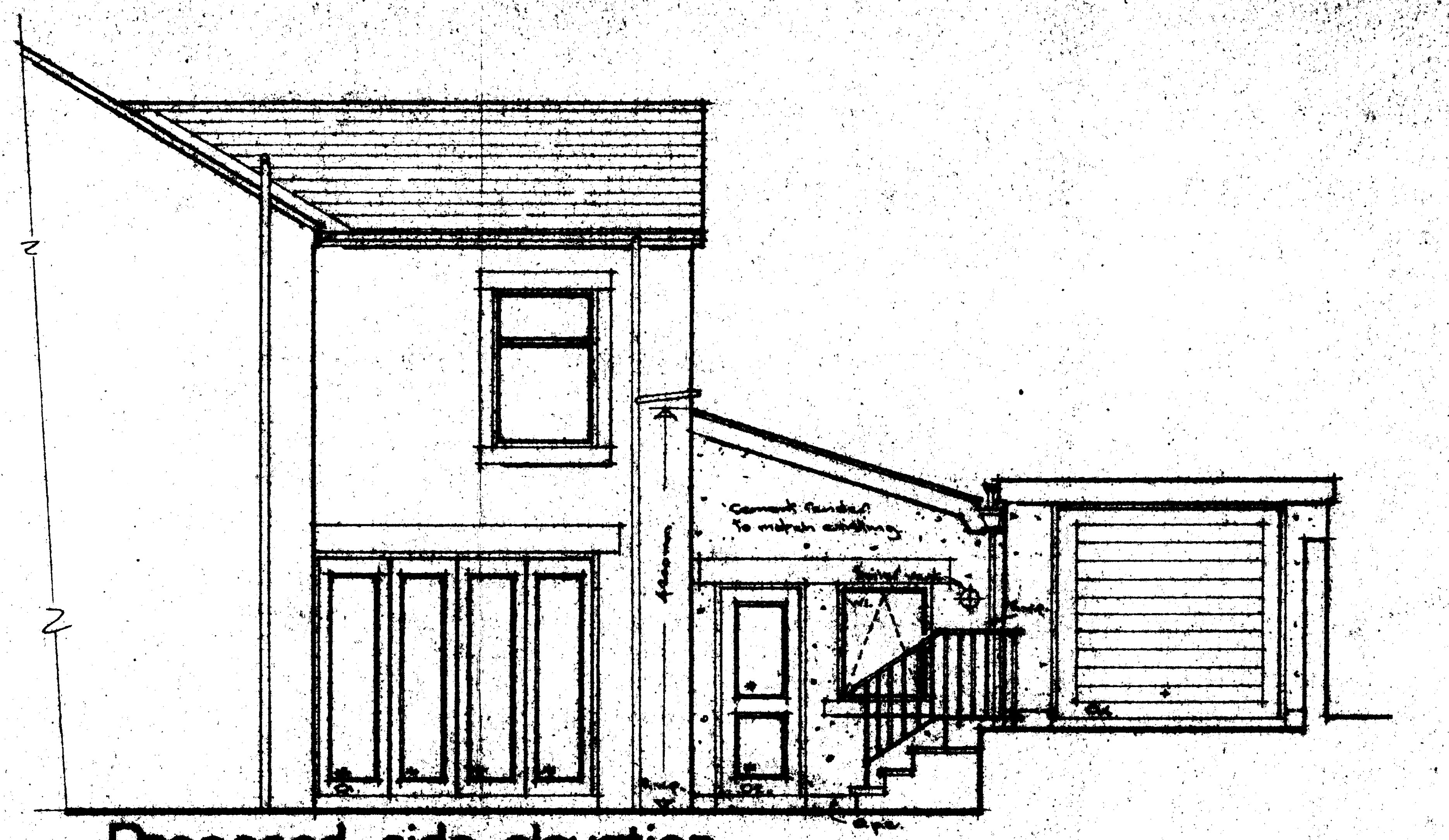
Lean to roof - Cambrian slates on 38x25mm. battens on reinforced breathable felt on 150x63mm. rafters at 400mm. centres (double rafter to each side of rooflights)
Ceiling - 10mm. plbd. on 500 gauge Visqueen vapour barrier on 150x50mm. ceiling joists at 400mm. c/s. Insulation - 100mm. fibre glass quilt between joists plus 170mm. f.g.q. over joists. Ditto to continue all around rooflight lightwells.
Roof space to be ventilated via slate vents to give equivalent of 25mm. continuous air gap to top & bottom of roof slope. Minimum air space over insulation 50mm
Garage roof - Solar reflective finish on 3 No. layer built up felt on 18mm. W.B.P. ply on 170x50mm joists plus firrings at 400mm. centres.
100x50mm. wallplate strapped 1000mm. down wall with 30x5mm. galv. m/s. straps at 1200mm. c/s.

Walls - Cement render on 100mm. concrete block - 100mm. cavity with 50mm. Kingspan insulation fixed to 100mm. Thermalite 'Turbo' block with lightweight plaster finish. S/S twist ties at 750 horiz. x 450 vert. centres. New & existing walls well keyed in & cavities made continuous. Cavity closed at top of wall & around all opgs. by inner leaf on insulated d.p.c. Concrete cavity fill to g.l. & adjoining garage floor levels.

Floor - 100mm. concrete slab on 50mm. Kingspan insulation on 1200 gauge Visqueen d.p.m. on sand blinded [illegible] fill - [illegible] turned up the edge of external walls. D.p.m. & wall d.p.c.'s to be lapped & made continuous [illegible] Insulation omitted to Garage.

Stud partition - 13mm. Gyproc Wallboard to b/s. 75x50mm studs at 400mm centres, with Isowool Acoustic Roll fill between studs.

All new windows to be double glazed with Low E glass in Pvcu frames [illegible] supplied all to achieve 'U' value of 1.8W/m²K. Opg. lights to equal 1/20 floor area plus high level controllable trickle vents of 8000mm² Glazing shown ≠ to be approved safety glass.
Lintels - 01. - Beams on calculations below.
02 - Catnic CX 90/100.
03 - 3 No. 150x150mm. rein. conc. lintels.
04 - 2 No. roof joists bolted together.
Feature reconstructed stone cills & lintels on elevation.



Proposed side elevation.

Ventilation - Kitchen to have mechanical extract with manual control to clear 60 litres/second.
Utility - ditto to clear 30 litres/second.
Bathroom - ditto to clear 15 litres/second.

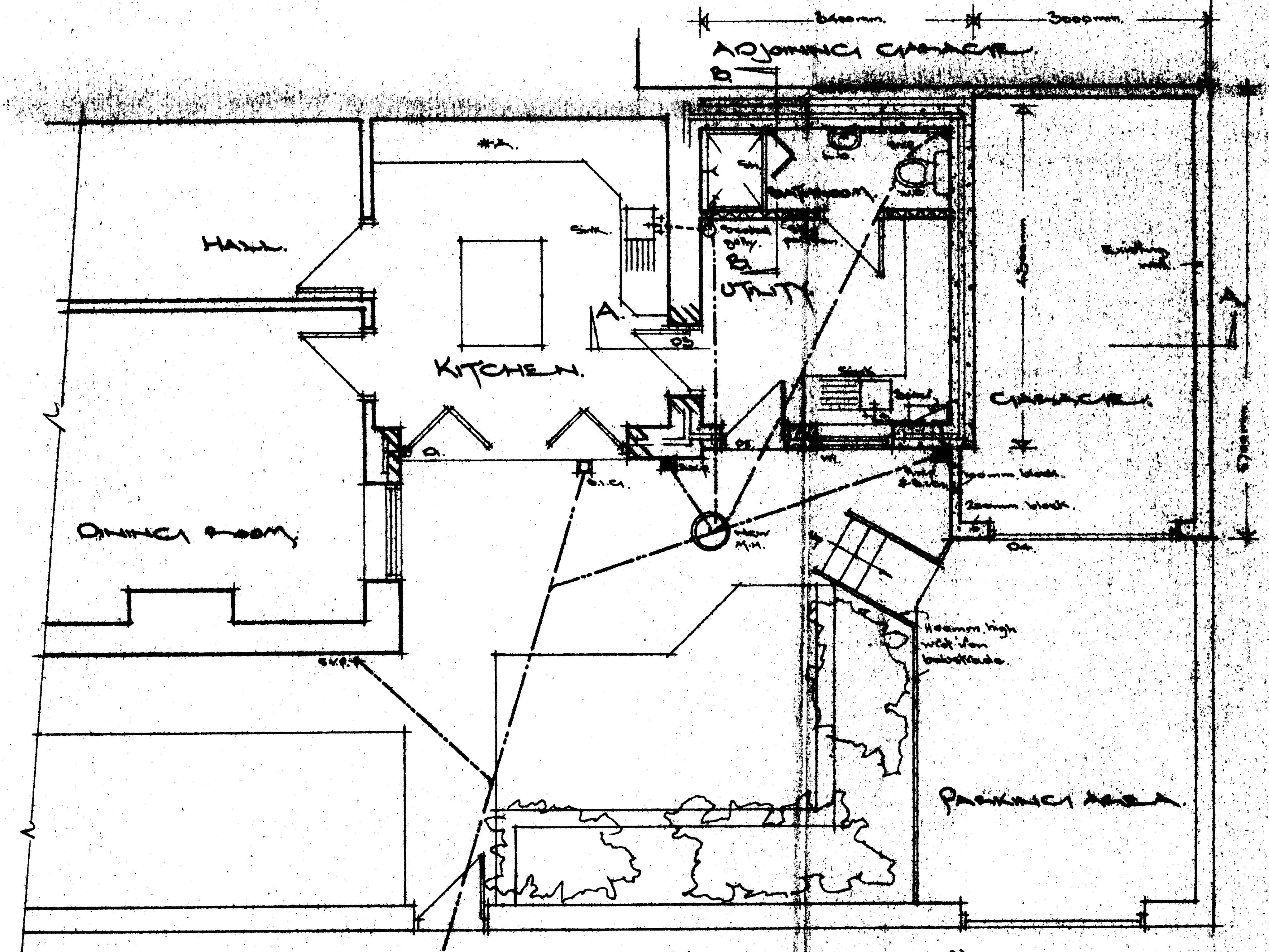
Drainage - Sinks & showers to have 40mm. Ø waste. W.C. to have 100mm. Ø waste. All to have 75mm deep seal traps.
All new drains to be 100mm. Ø u.p.v.c. Osma Supersleeve. Drains passing under building to be encased in 150mm. concrete. Foundations to step below invert level with wall lintelled over at wall openings. New M.H. to be high density polyethylene to B.S. Alternatively with cover drain cover & frame.
All to approval of Local Authority.

*A. - Chimney breast in Kitchen & Bedroom over - Make good all round to match existing.

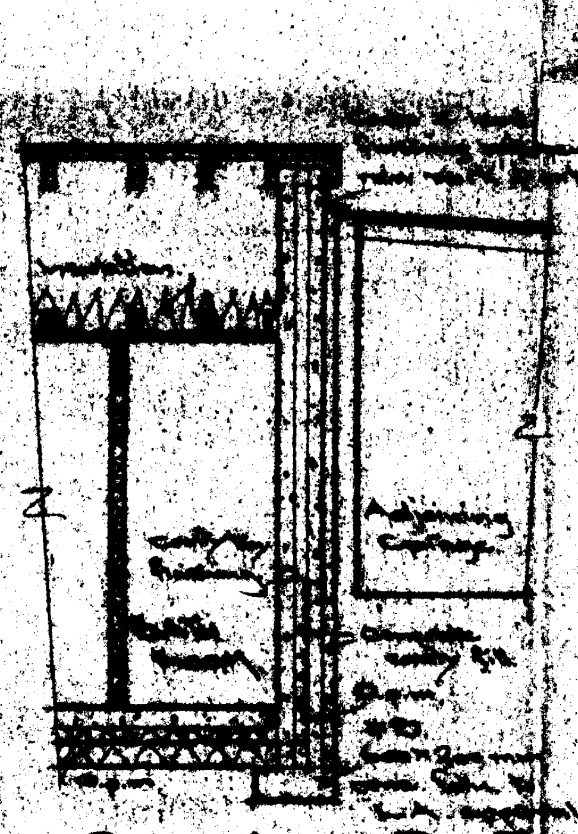
All electrical work should be carried out in accordance with Building Regs Part P & should be designed, installed, tested & certified by persons competent to do so. Prior to completion the L.A. should be issued with the appropriate BS7671 Electrical Installation Certificate.

Gas fired balanced flue condensing boiler to be installed to Comply Regs. & L.A. approval.

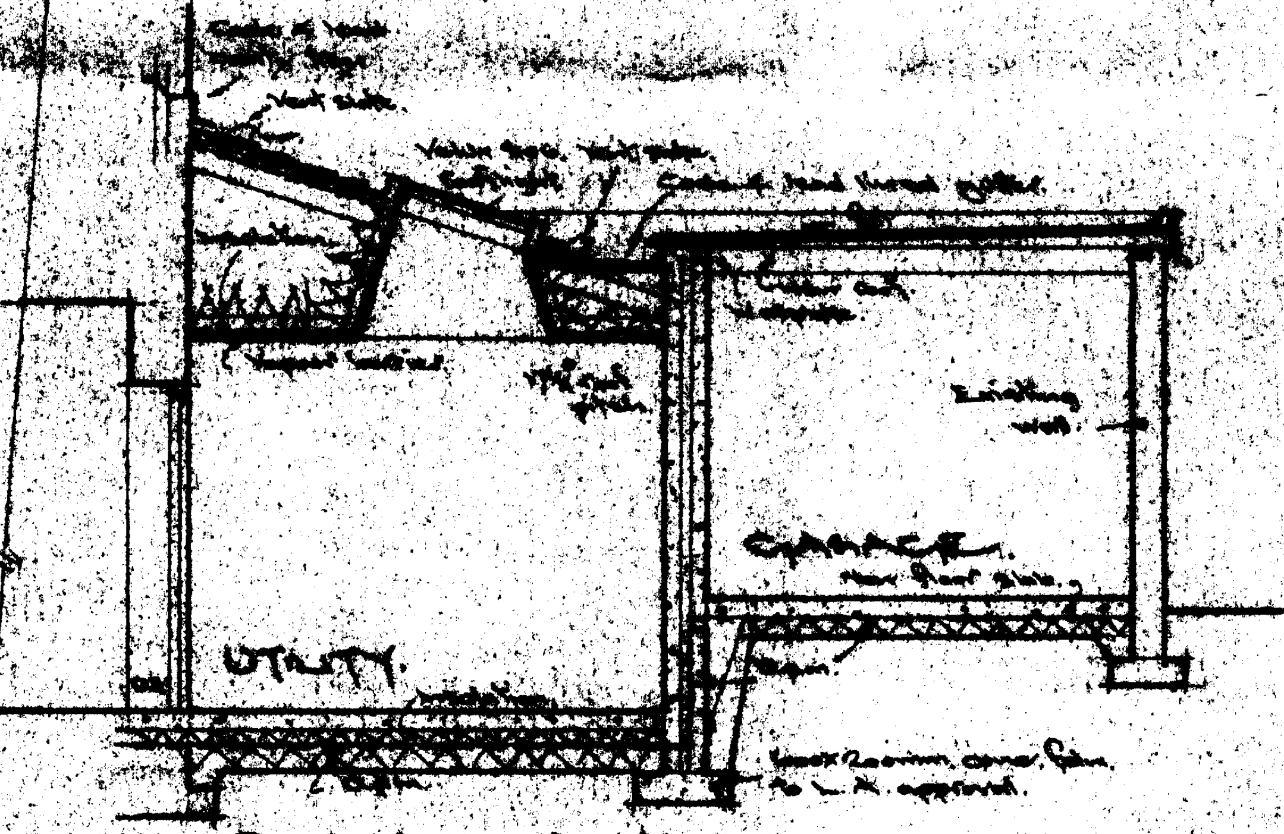
All carpentry timber to be Grade C24.



Proposed plan.



Section B-B.



Section A-A.

*B. - Trial hole to be dug down side of existing wall before work proceeds for L.A. inspection & final foundation detail agreed.

Applicant to obtain adjoining owners consent to comply with Party Wall Act 1996.

Contractor to include heating, lighting & power to clients requirements.

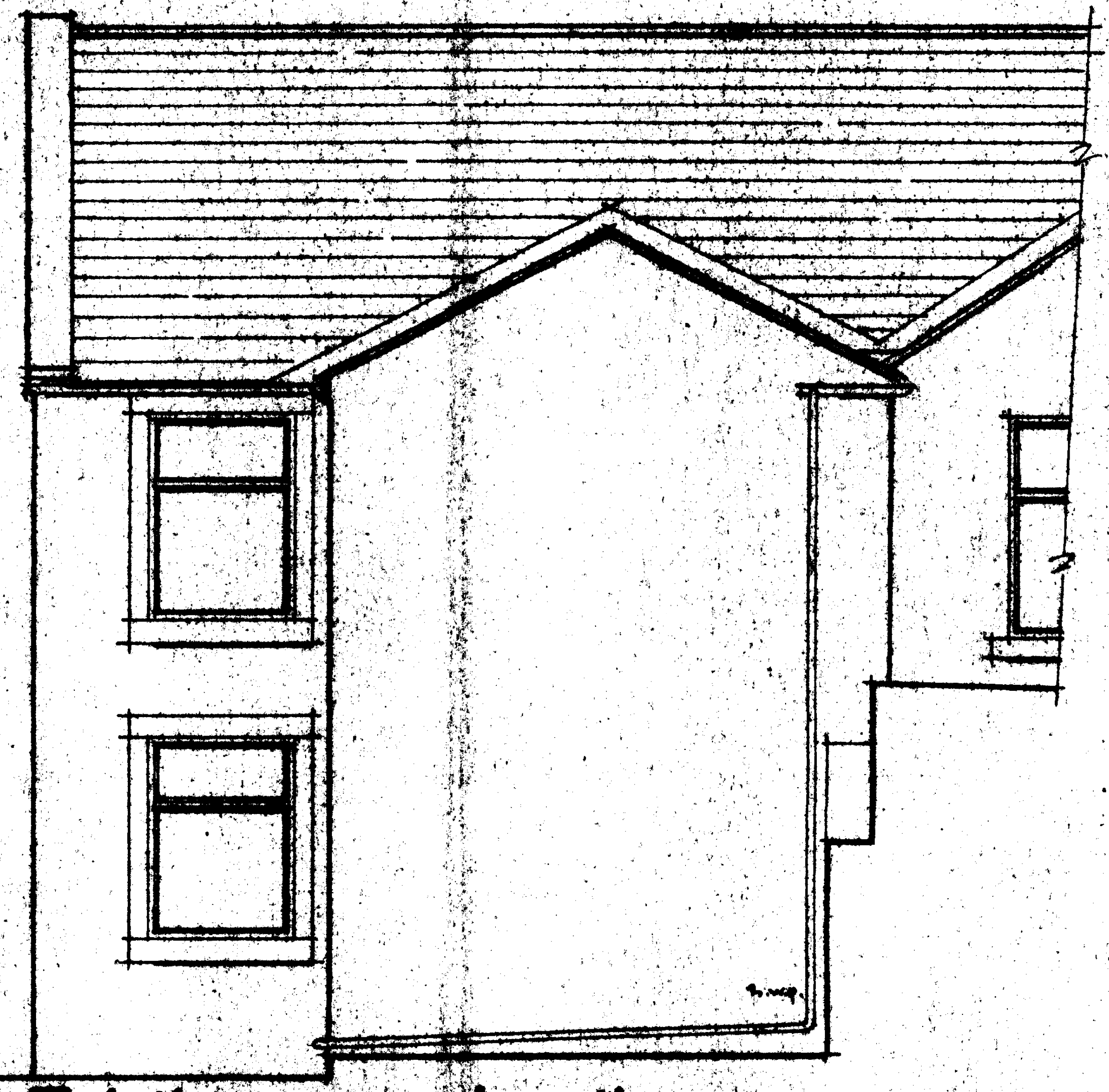
All dimensions to be checked on site.

3 200805 19P

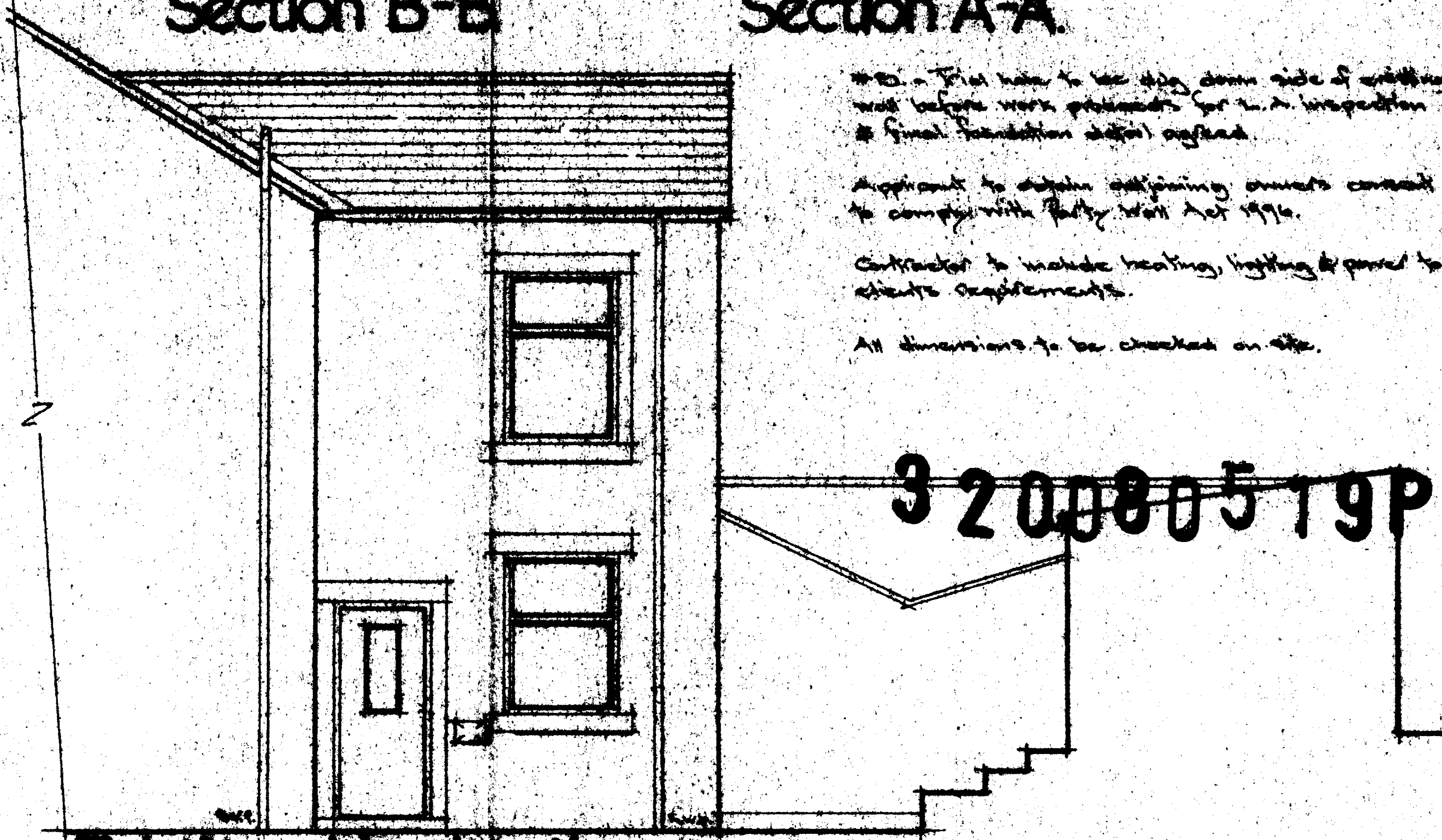
Lintel calc's to 01. (Check worst case to inner leaf).
Span - 2.8M.
Load - Wall 3.2x2.5 = 8.00
Roof 2.5x1.7 = 4.25
12.25 KN/M
Total U.D.L. = 2.8x12.25 = 34.30 KN.
Allowable def = $\frac{2800}{360}$ = 7.8mm
I reqd. = $\frac{5 \times 34.30 \times 2.8^3 \times 10^9}{384 \times 210 \times 7.8}$ = 598.53 cm⁴.
Try 178x102mm x 19Kg U.B. (I = 1356 cm⁴ Z = 153 cm³)
B.M. = $\frac{34.30 \times 2.8}{8}$ = 12.01 KNM.
Pbc = 100N/mm² fbc = $\frac{12.01 \times 10^3}{153}$ = 78.49 N/mm²

Use 3 No. 178x102mm. x19Kg. U.B.s bolted together with spacers to suit wall construction.

Outer beam to have welded plate to carry feature lintel.
400x200x200mm. concrete padstones to both ends.



Existing rear elevation.



Existing side elevation.

Proposed Rear Extension at - 41 West View, Clitheroe. for - Mr C. Lee.

Dwg. CL/08/01.