

REF: 10 PARK HOLLOW, WOMBWELL

Attachments:-

- 001 Existing site plan
- 002 Ordnance Survey map
- 003 Existing and Proposed Floor Plan
- 004 Existing and Proposed side elevation - No changes.
- 005 Existing and Proposed side elevation
- 006 Existing and Proposed rear elevation - No changes
- 007 Existing and Proposed front elevation
- 008 RSI Calculations and plan
- 009 General notes

Beams are kitchen

3600mm span

Wall

$$3.0 \times 2.5 \times 2.1 \text{ k/m}^2 = 16 \text{ k}$$

Roof

$$3.0 \times 1.5 \times 2.0 \text{ k/m}^2 = 18 \text{ k}$$

+ 9 k reaction from previous beam

Floor

$$3.0 \times 1.5 \times 2.1 \text{ k/m}^2 = 9.5 \text{ k}$$

43.5 k

$$\text{Moment} = \frac{43.5 \times 3}{8} = 16.3 \text{ kNm}$$

203x102 RSJ

$$L_{eff} = (3600 + 400) \times 1.2 = 4080 \text{ mm}$$

$$\frac{L}{r_{yy}} = \frac{408}{2.37} = 172 \quad \frac{\lambda}{T} = 21.8$$

$$p_{bc} = 90 \text{ N/mm}^2$$

$$f_{bc} = \frac{16.3 \times 10^6}{206 \times 10^3} = 79 \text{ N/mm}^2$$

USE - 2 No 203x102 RSJs

or 225x250x150 IPEP

Concrete fasteners

Document end

3800mm span over kitchen

Wan

$$3.8 \times 2.6 \times 2.1 \text{ kN/m}^2 \approx 21 \text{ kN}$$

Floor

$$3.8 \times 3.4 \times 2.1 \text{ kN/m}^2 \approx \frac{28 \text{ kN}}{49 \text{ kN}}$$

$$\text{Moment } m = \frac{49 \times 3.8}{8} = 24 \text{ kNm}$$

203x133x30 kg/m UB

$$L_{eff} = (3800 + 400) 1.2 = 5040 \text{ mm}$$

$$\frac{L}{r_{yy}} = \frac{504}{3.18} \approx 159 \quad D_{IT} = 21.5$$

$$p_{bc} = 94 \text{ N/mm}^2$$

$$f_{bc} = \frac{m}{Z} = \frac{24 \times 10^6}{279.3 \times 10^3} = 86 \text{ N/mm}^2$$

203x133x30 kg/m U. Beam

~ 350x100x150 deep

CONCRETE (C30) PARASOLERS

General Notes

1. All works to comply with the current building regulations.
2. Minimum headroom to all habitable rooms to be 2300mm and minimum headroom underside of all beams to be 2000mm.
3. All material to be fixed/applied in accordance with the manufacturers recommendations.
4. Any alterations to the approved plan must not be made unless prior approval is given by local authority.
5. The builder is to comply with the approved plan at all times.
6. The builder is responsible for any propping or temporary works whilst construction is on going.

Construction Specification

FOUNDATIONS – All foundations to be a minimum of 450mm below ground level and hooked below the existing foundations.

EXTERNAL WALLS – To be constructed from brickwork matching existing. 50mm clear cavity and 30mm insulation and 115mm blockwork to be held in place by retaining clips on stainless steel wall ties and give a U value of 0.35w/m sq and plastered internally. No blockwork to be positioned below ground level.

DAMP PROOF COURSE – To be positioned not less than 150mm above ground to all walls and horizontally/vertically to window opening. Stepped DPC to air brick on external wall.

FLOOR CONSTRUCTION – 18mm T&G flooring grade boarding/chipboard on joists at 400mm crs.

LEAN TO PITCHED ROOF CONSTRUCTION – Interlocking concrete roof tiles to match existing fixed to battens on 1 layer of monofoil felt on 12mm thick plywood on counter battens on 38 x 195mm rafters @ 600mm centres. Insulation to be placed within and over rafters and plasterboard and finish. Gable end as existing UPVC cladding. Guttering to be extended.

DRAINAGE – Existing drains to be used

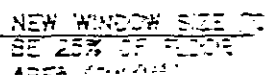
LINTOL – To window to be mild steel and fitted as per manufacturers instructions. To removed walls, as per specification attached and fitted as per manufacturers instructions.

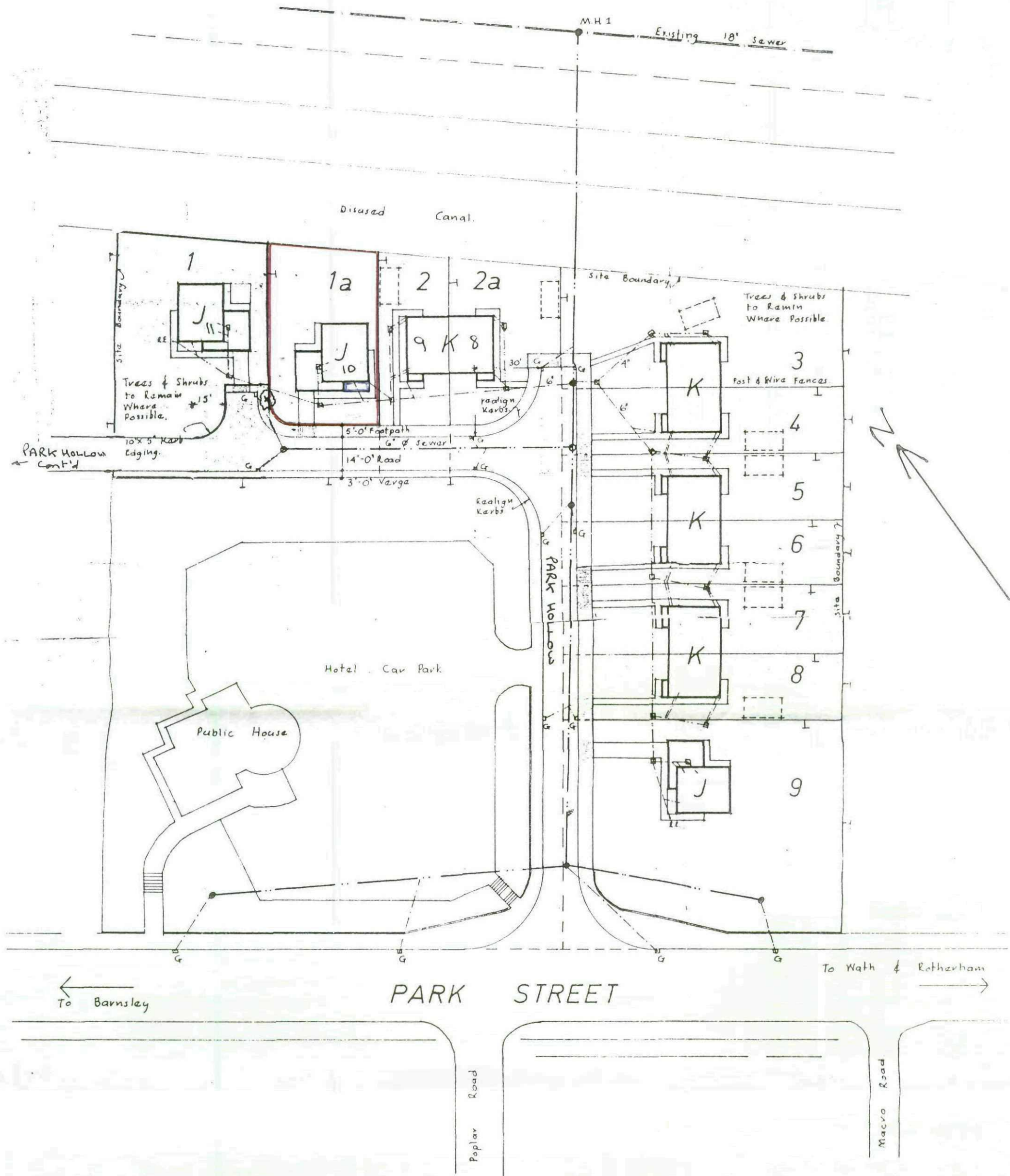
ELECTRICAL FITTINGS – Lighting and power circuits to be extended and installed to latest IEE wiring regulations by qualified specialist contractors.

HEATING – Extensions to heating system to be completed by specialist contractor.

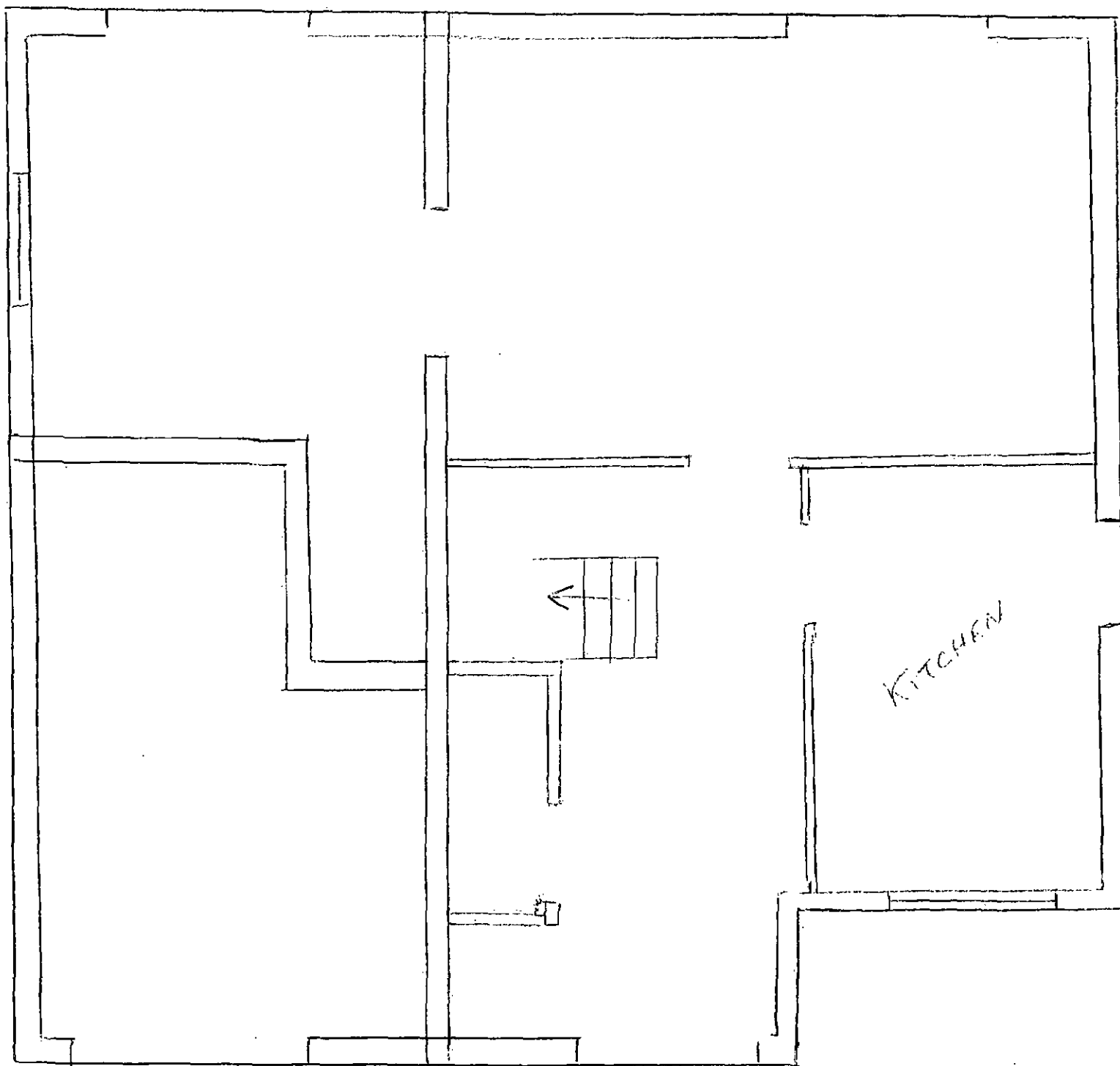
WINDOW – New window to be double glazed with all gaps around windows to be sealed with foam.

AIR BRICK – Single airbrick to replace existing.





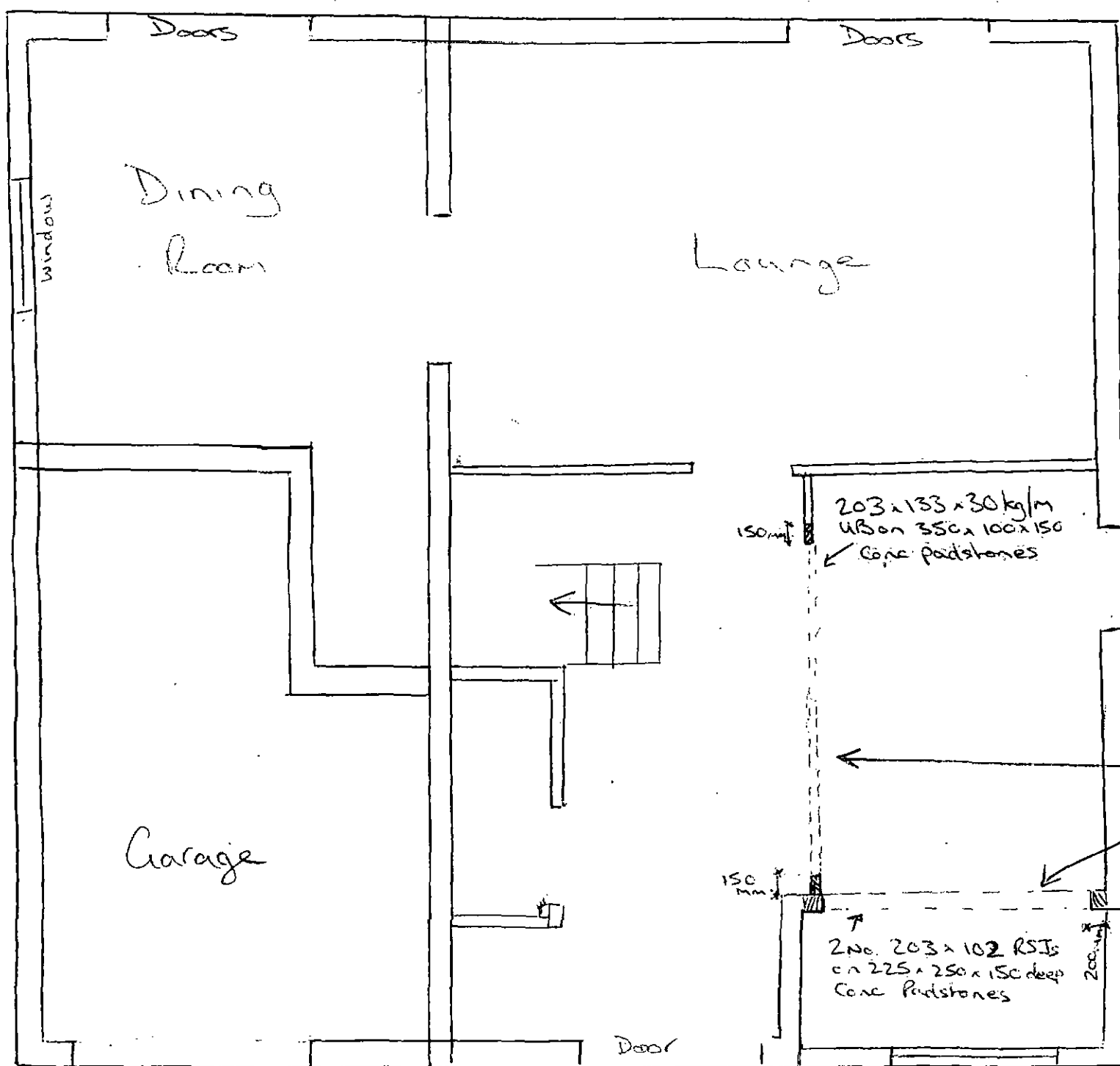
MR ELSHAW
 10 PARK HOLLOW, WOMBWELL, BARNSLEY
 EXISTING SITE PLAN BOUNDARY MARKED RED
 PROPOSED EXTENSION BLUE



Existing Door

KITCHEN

EXISTING GROUND FLOOR PLAN 1:50



Doors

Doors

Windows

Dining Room

Lounge

Garage

150mm

203x133x30 kg/m
UR on 350x100x150
Cone padstones

Existing door

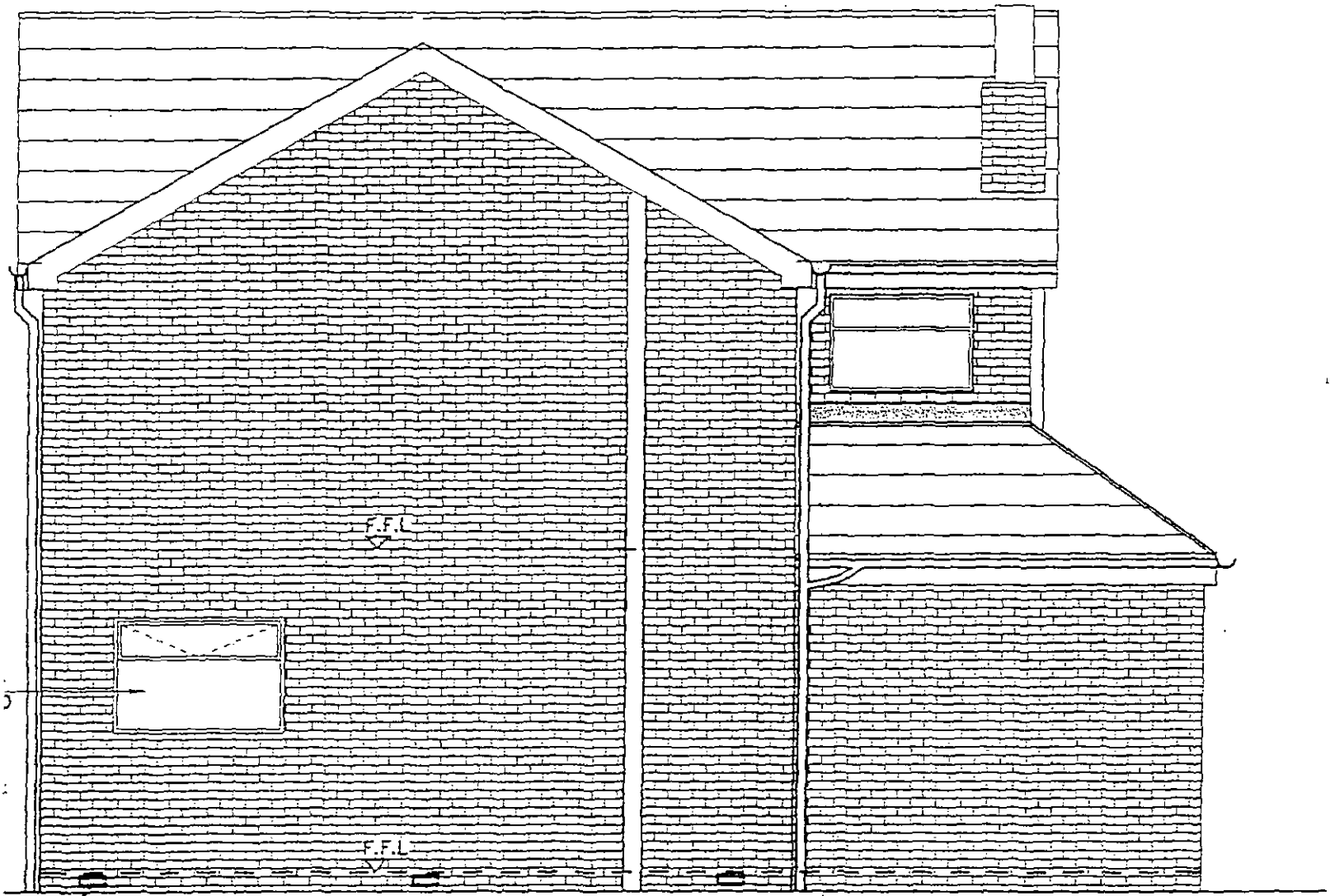
150mm

2 No. 203x102 RSTs
on 225x250x150 deep
Cone Padstones

Existing walls
removed RST's
as per attached
spec.

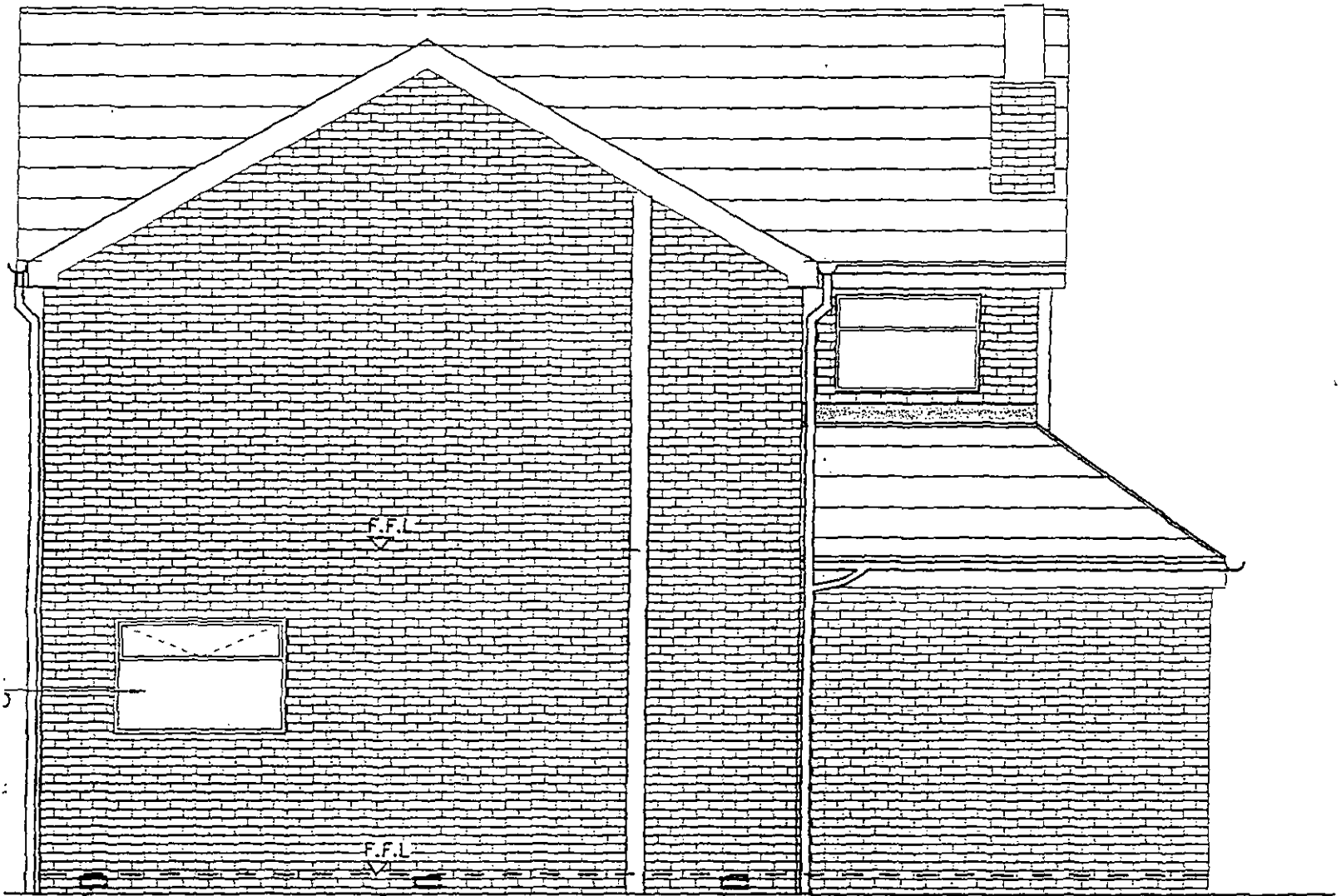
Door

Windows to match



DENOTES AIR
BRICK (TYP)

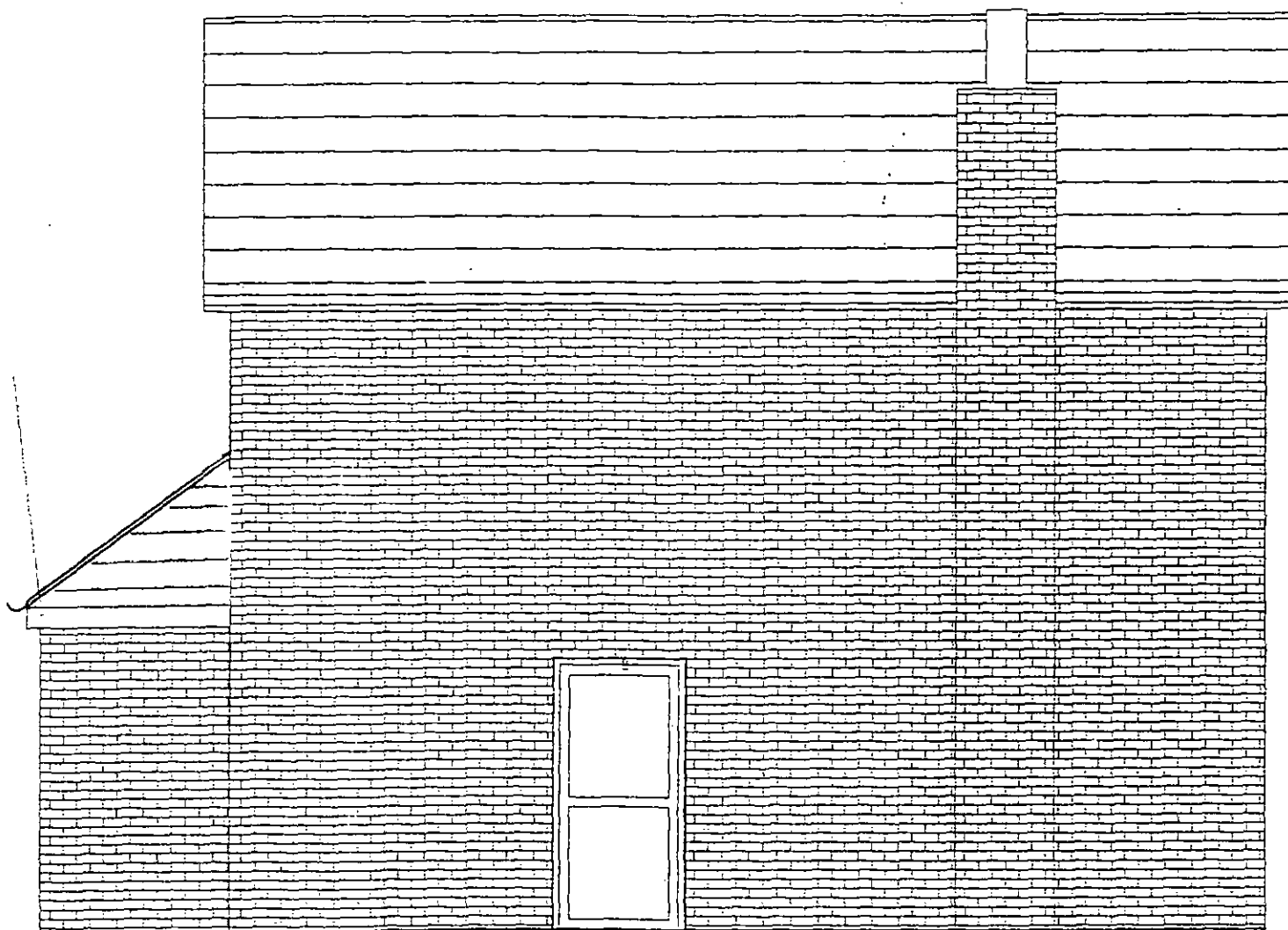
EXISTING SIDE ELEVATION 1:50



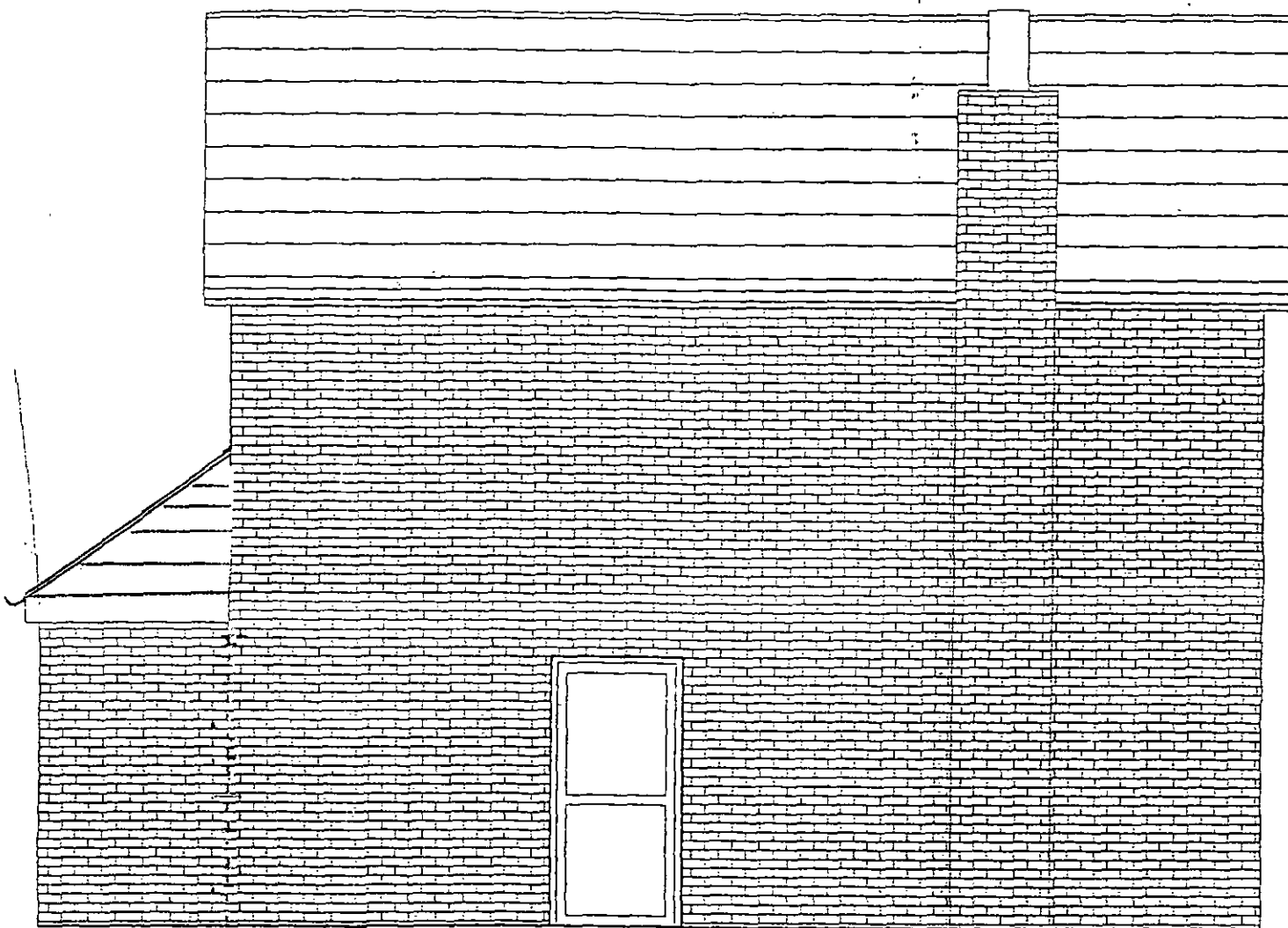
DENOTES AIR
BRICK (TYP)

PROPOSED SIDE ELEVATION 1:50

NO CHANGES



EXISTING SIDE ELEVATION 1:50



PROPOSED SIDE ELEVATION 1:50



EXISTING REAR ELEVATION 1:50

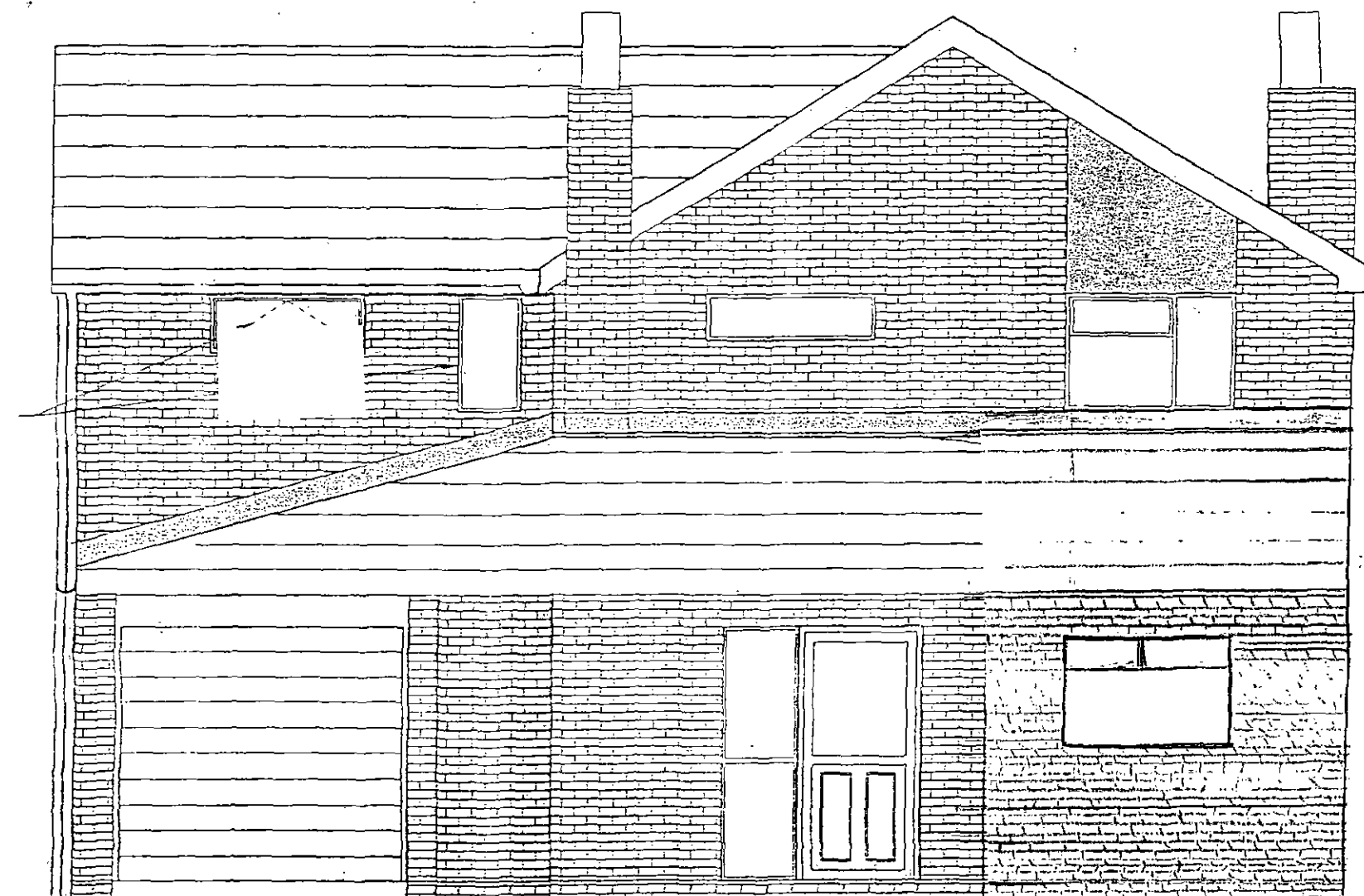


PROPOSED REAR ELEVATION 1:50 NO CHANGES

Drawing 006



EXISTING FRONT ELEVATION 1:50



PROPOSED FRONT ELEVATION

Drawing 007.