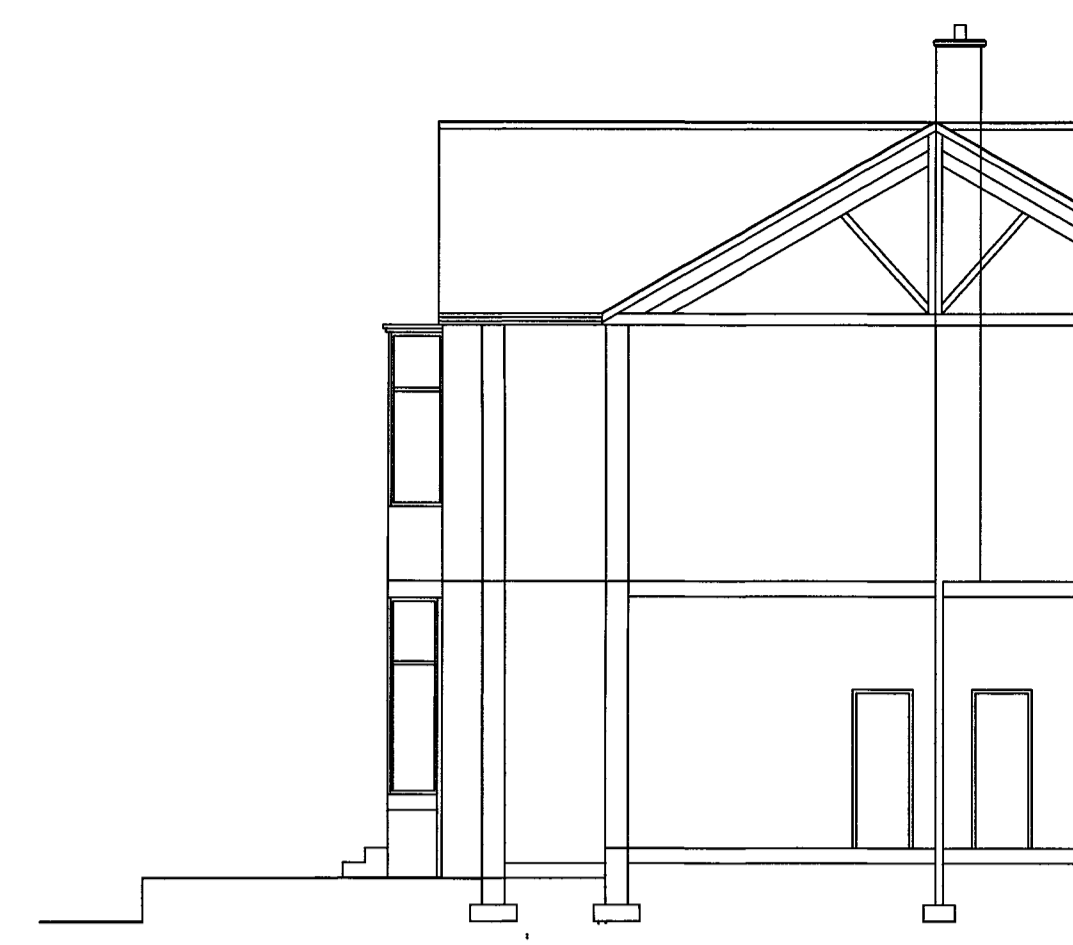




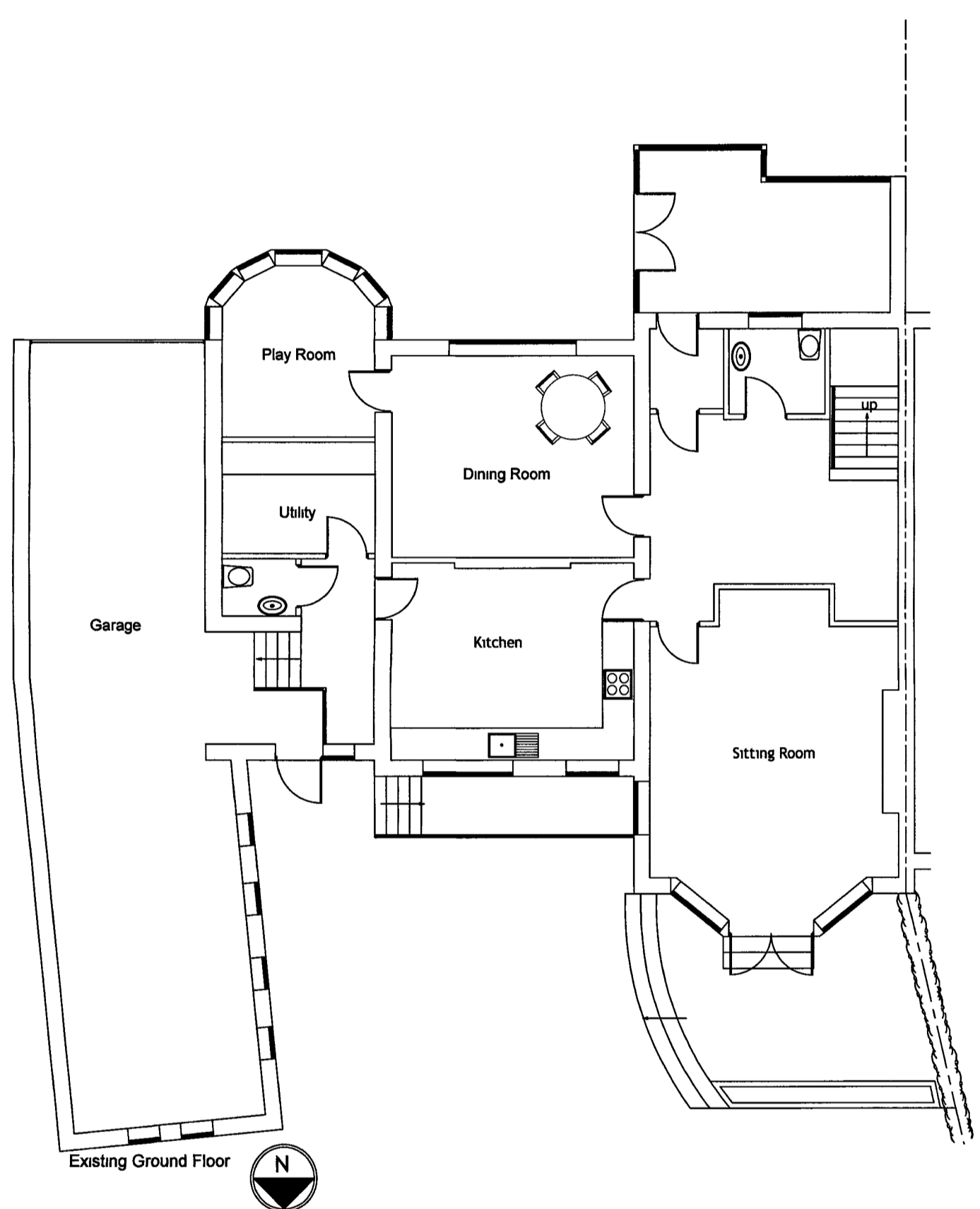
Existing Rear Elevation



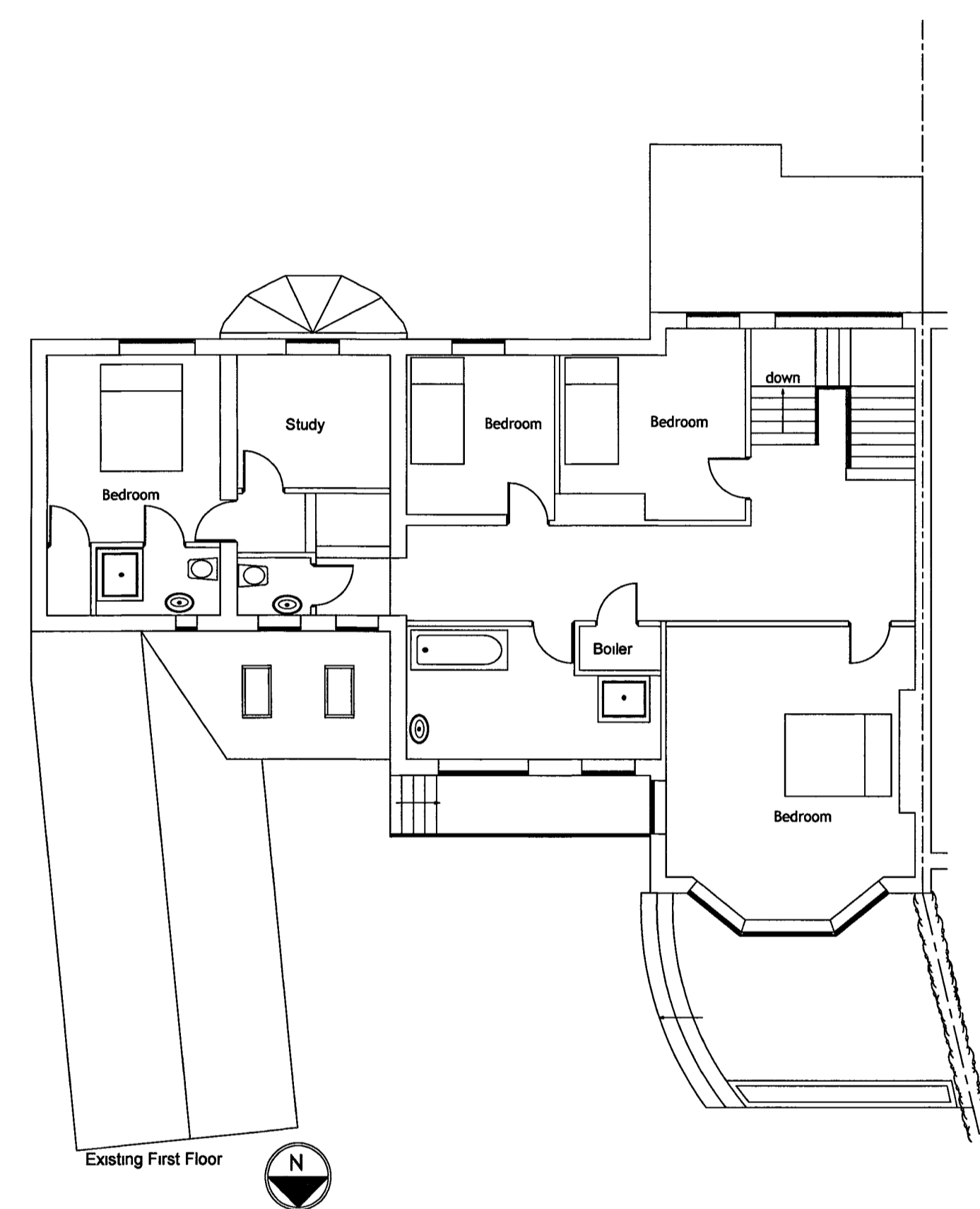
Existing Side Elevation



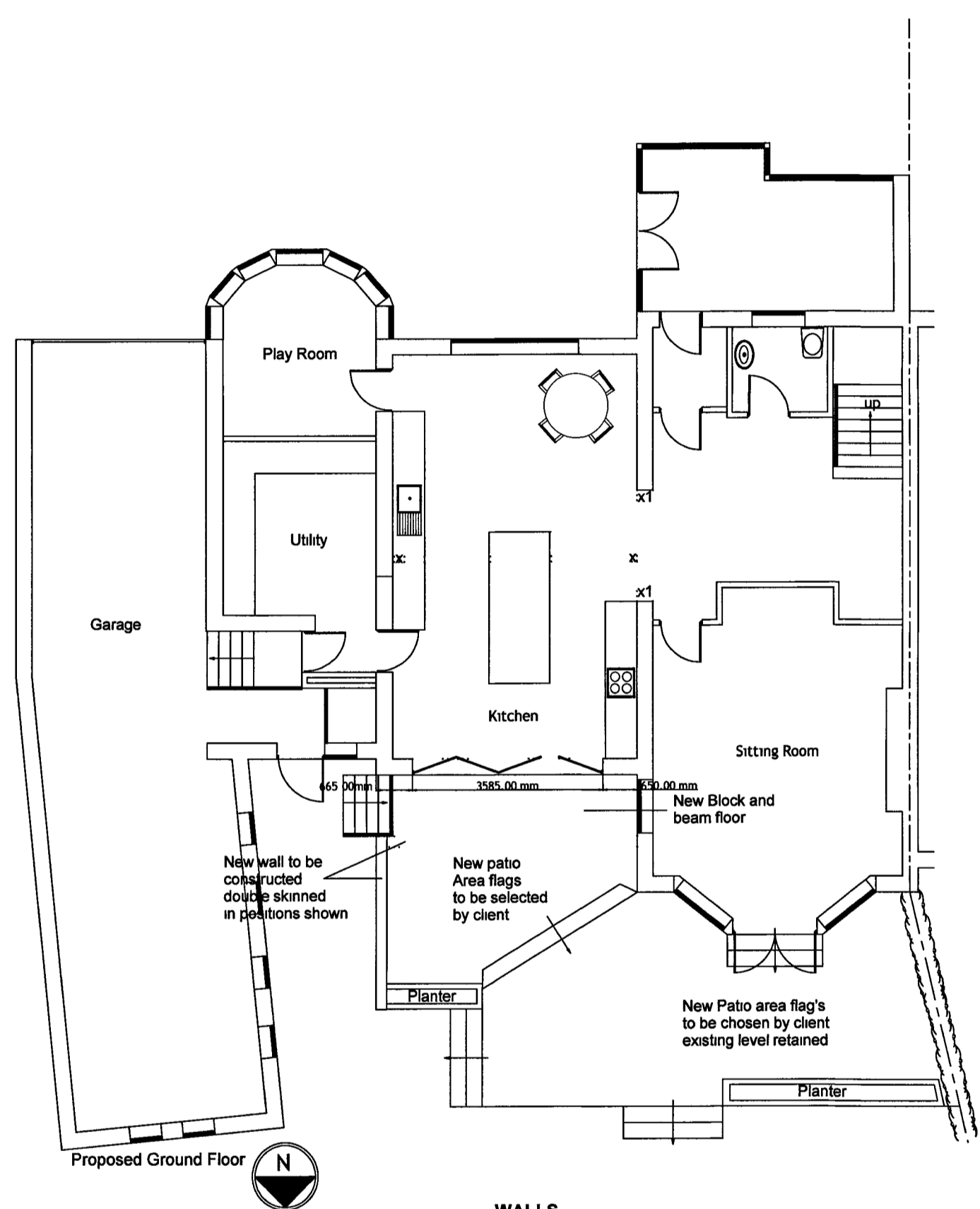
Existing Side Elevation



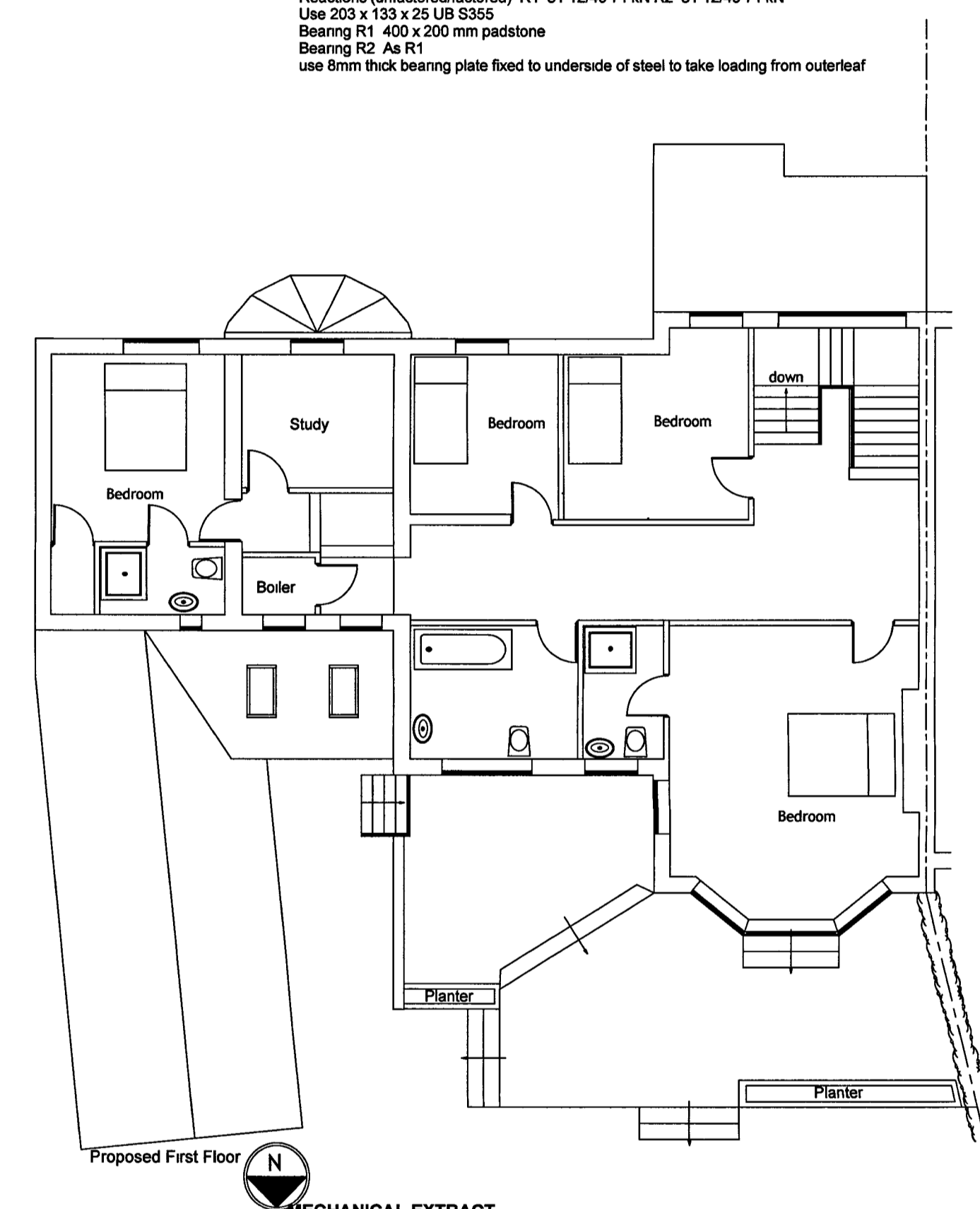
Existing Ground Floor



Existing First Floor



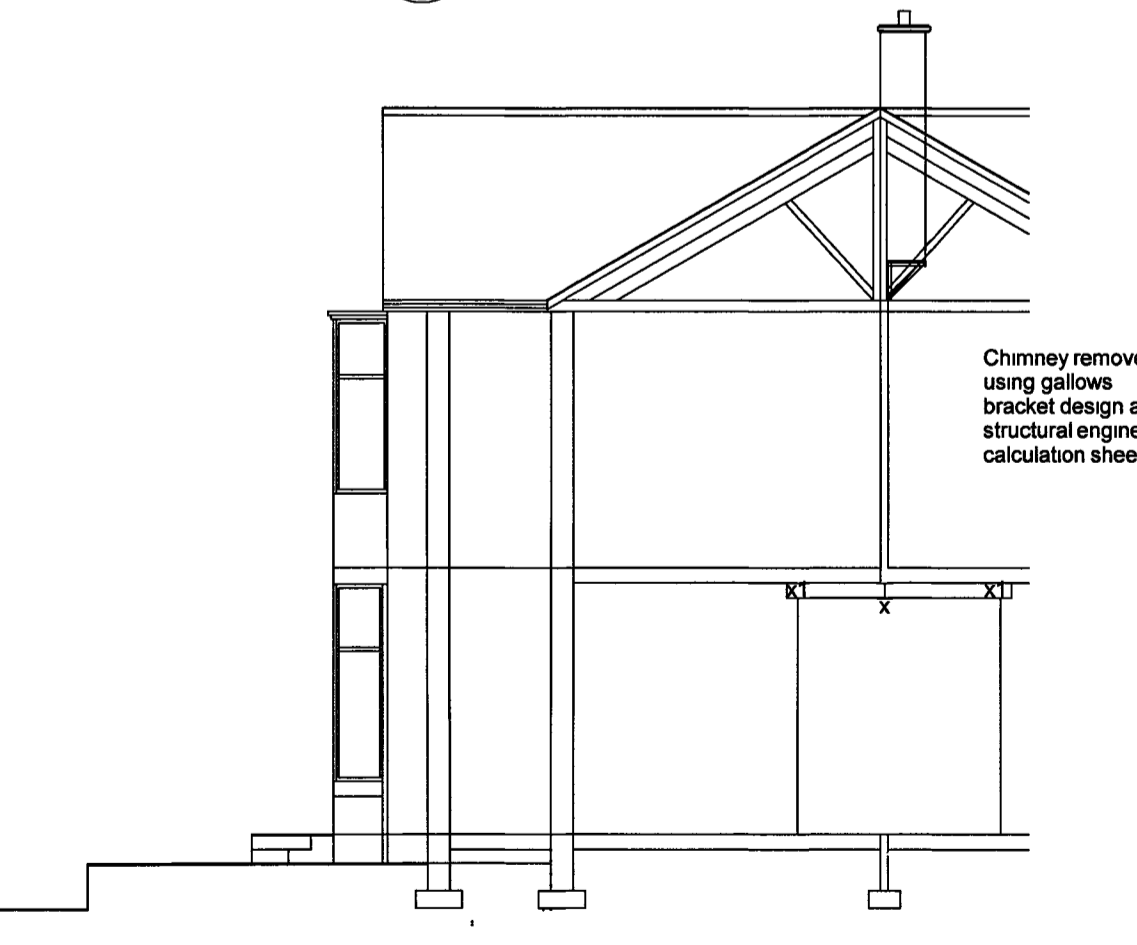
Proposed Ground Floor



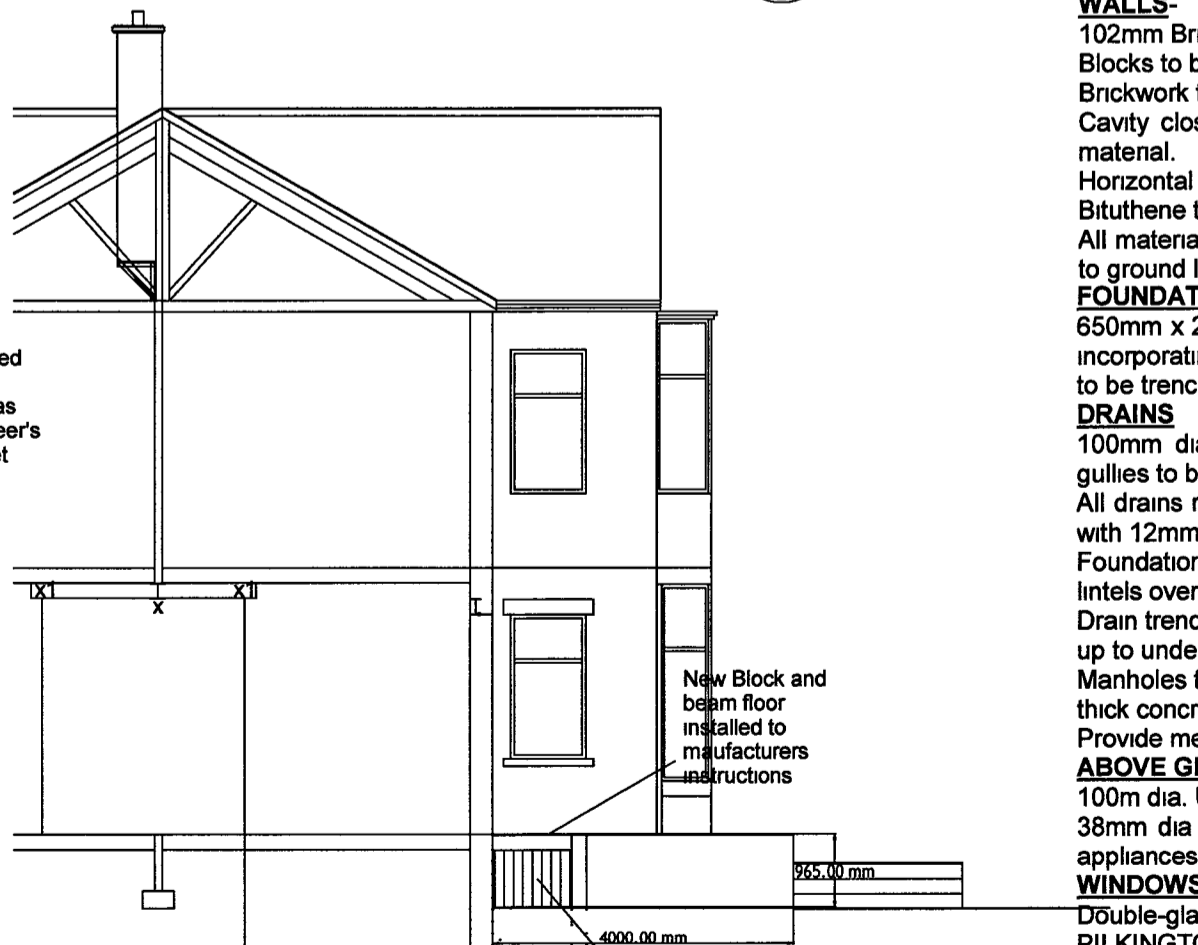
Proposed First Floor



Proposed Rear Elevation



Proposed Side Elevation



Proposed Side Elevation

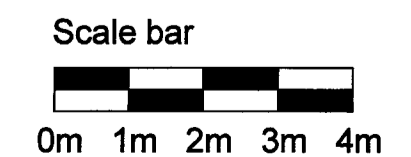
**GENERAL-**  
All electrical work is to conform to BS 7671 2018 and current IEE Regulations. Sockets and light fittings to be the client's choice and design please refer to guidance stipulated in section 4.24 of A D L1B section 12 & table 40 of Domestic Building Services Compliance Guide 2010 edition.  
Sockets and light switches are to be positioned between 450mm and 1200mm from finished floor level.  
Before any construction commences the adjoining owners consent must be obtained for any work on the boundary.  
Architraves and skirting to match existing.  
Internal and external doors are to be client's choice and design.  
Insulate all heating and hot water pipes under the floor.  
Any new radiators are to be fitted with thermostatic radiator valves to control room temperature.  
Refuse collector to be maintained.  
Provide mains operated interlinked smoke detectors to BS 5446 2000 PART 1, on all floors, within 3m of a bedroom and 7.5m to any other rooms. The detectors are to be wired to a separately fused circuit and distribution board. The detectors are to be ceiling mounted at least 300mm from walls and light fittings. Units designed for wall mounting may be used if they are fixed above the level of all doors and are fixed in accordance with the manufacturers instructions. The sensors in predominantly flat ceilings are to be between 25 and 600mm below the ceiling, (25-150mm in the case of heat detectors) sensors should not be fitted to heaters or air conditioning outlets.  
The existing foundations, walls and lintels are to be checked for suitability before work commences.  
All structural timbers to be tanalised.

**COMPLIANCE WITH CONSTRUCTION-**  
There are no particular processes or construction methods that produce unusual risks to health and safety during construction or in subsequent maintenance works. All usual precautions are to be taken to protect the workforce and the building occupants.  
All materials and products are to be used in accordance with the manufacturers instructions, British Standards, Codes of Practice and good building practice.  
Where the works are subject to Local Authority interest, say by way of a grant, the contractor is to make himself aware of any requirements.  
The contractor is to inform the Health and Safety Executive should any of the works falls within their interest.  
The contractor is advised to visit the site so as to become thoroughly acquainted with the scope and extent of works, to satisfy themselves as to accessibility of the site and to make their own risk assessment of the project.  
Arrangements to visit the site must be made through the client.

**ITEMS**  
1 Beam xx  
Span 4.7 m  
Reactions (unfactored/factored) R1 65.26/104.09 kN R2 65.26/104.09 kN  
Use 203 x 203 x 71 UC S355  
Bearing R1 1500 x 100 mm padstone  
Bearing R2 Not specified  
2 Beam x1-x1  
Span 2.1 m  
Reactions (unfactored/factored) R1 57.11/91.22 kN R2 62.06/99.15 kN  
Use 203 x 203 x 46 UC S355  
Bearing R1 550 x 300 mm padstone  
Bearing R2 500 x 300 mm padstone  
3 End plate connection  
Beam (Item 1) 203x203x71 UC connects to web of beam [Item 2] 203x203x46 UC  
Unfactored/factored load carried by connection = 65.26/104.1 kN  
Use 150mm long 8mm S275 end plate with 2 pairs of M20 bolts at 70 c/s  
Connection capacity 125.0 kN OK  
4 Beam Beam at Bifold  
Span 3.6 m  
Reactions (unfactored/factored) R1 31.12/48.71 kN R2 31.12/48.71 kN  
Use 203 x 133 x 26 UB S355  
Bearing R1 400 x 200 mm padstone  
Bearing R2 As R1  
use 6mm thick bearing plate fixed to underside of steel to take loading from outerleaf

**WALLS-**  
102mm Brickwork outer leaf with 102mm brickwork innerleaf  
Blocks to be laid in stretcher bond in 1:1:6 cement mortar  
Brickwork to be tied to existing and all cavities to be maintained  
Cavity closed at top of wall with slate or similar non-combustible material.  
Horizontal dpc 150 minimum above ground level and provide Bituthene tanking lapped into the dpc  
All materials below ground level are to be frost resistant. Fill cavity to ground level with weak mix  
**FOUNDATIONS-**  
650mm x 225mm deep strip foundation 450mm below ground level incorporating C385 reinforced mesh. Foundations at boundary walls to be trench fill type 450mm thick BS8004.2015.  
**DRAINS**  
100mm dia upvc drains surrounded in pea gravel (150mm) All gullies to be back inlet types and roddable  
All drains running under building to be encased in 150mm concrete with 12mm flexcell joints @ 1500mm c/c  
Foundations to be stepped below drains with reinforced concrete lintels over to support b/wk.  
Drain trenches within 1m of foundation to be backfilled with concrete up to underside of foundation  
Manholes to be built in 225mm 2nd class engineering b/wk on 150mm thick concrete base  
Provide medium covers to all manholes  
**ABOVE GROUND DRAINAGE-**  
100mm dia Upvc half-round gutters and 100mm dia r/wps  
38mm dia waste pipes and 75mm deep seal traps to all sanitary appliances when connected to 100mm dia upvc svp  
**WINDOWS-**  
Double-glazed UPVC windows with 4/16/4 glazed units with Pilkington K glass with 20mm air gap (Low-E E=0.15) U values=1.4W/m2 degC- ventilation openings equal to 1/20th floor areas, + 8000mm2 background ventilation to comply with PAS 24

**MECHANICAL EXTRACT-**  
Provide mechanical extracts direct to open air in the following rooms.-  
▪ Bathrooms 15 Litres/sec  
▪ Bathrooms without windows 15 Litres/sec The extract fan is to be connected to the light switch and have a 30 min overrun, provide 10mm gap under door for ventilation.  
▪ WCs separate from bathroom 6 Litres/sec  
▪ Kitchens 30 Litres/sec adjacent to the hob or 60 Litres/sec elsewhere  
▪ Utility room 30 Litres/sec  
Where the sanitary accommodation is internal provide a 10mm gap under door for ventilation  
**LINTELS-**  
Lintels are to be Catnic CG90/100 or similar unless stated on plan  
Lintels are to have 150mm end bearing and be rendered to give 1/2 hour fire resistance. All lintels to external walls are to be insulated and have the ends closed with dpc  
**SAFETY GLAZING-**  
All glazing in critical areas to be laminated or toughened in accordance with BS 6206  
Manifestation to be provided where appropriate  
**ELECTRICALS-**  
13 amp ring main and lighting circuit to comply with latest edition of IEE regulations. Number and position of sockets to Client's instructions. All new electrical work is to be designed, installed, inspected and tested in accordance with BS 7671 2001 or an equivalent standard. These installation works are to be undertaken by a person registered with an electrical self certification scheme, or alternatively by a suitably qualified person, with a certificate of compliance produced by that person to Building Control upon completion of the works.  
**SERVICES-**  
Note existing boiler to be checked by GAS SAFE registered installer to assess capability for additional radiators to the new rooms. Provide thermostatic radiator valves



Proposed Internal and Garden Alterations to Rear at The Shieling, Elm Bank Rd, Wylam.  
Plans Showing Existing and Proposed Floor Layout's, Elevation's and Section. v4  
Scale 1:100 & Section 1:50 April : 2023