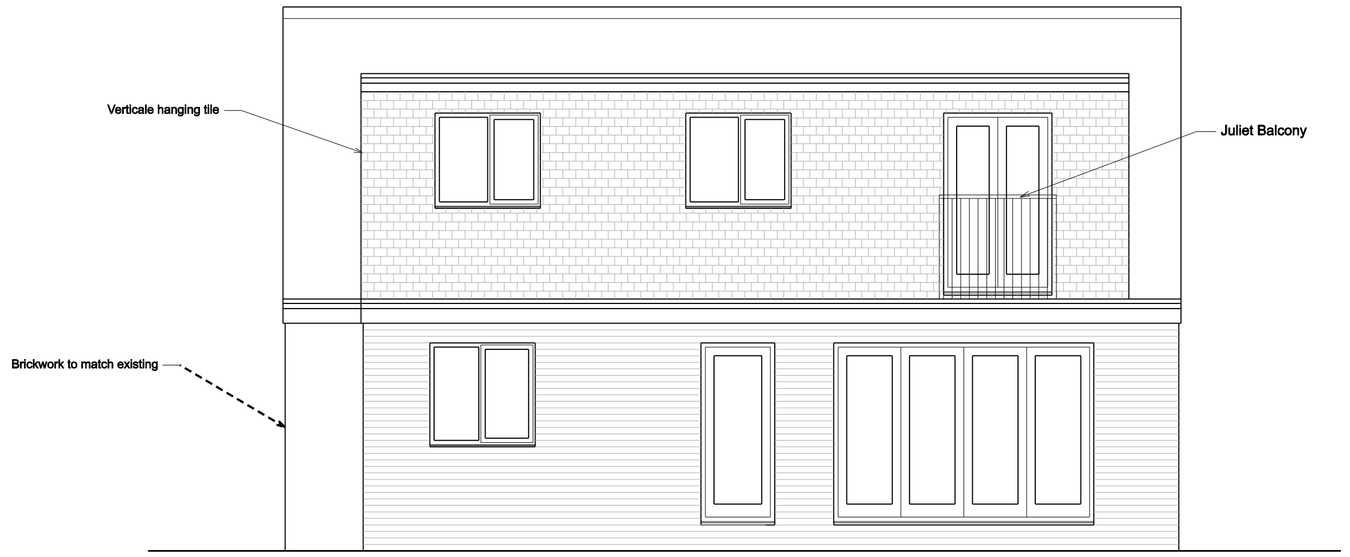
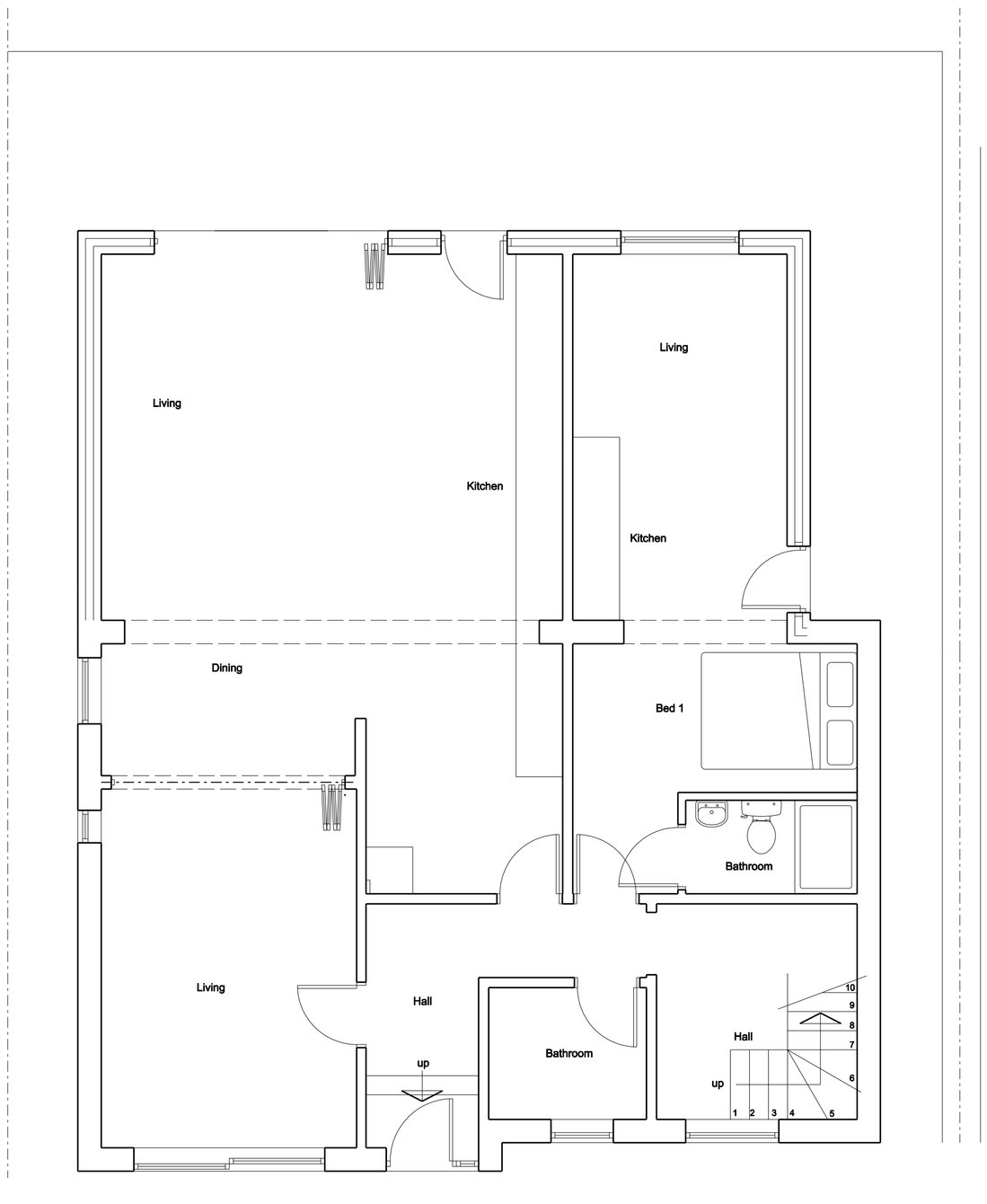
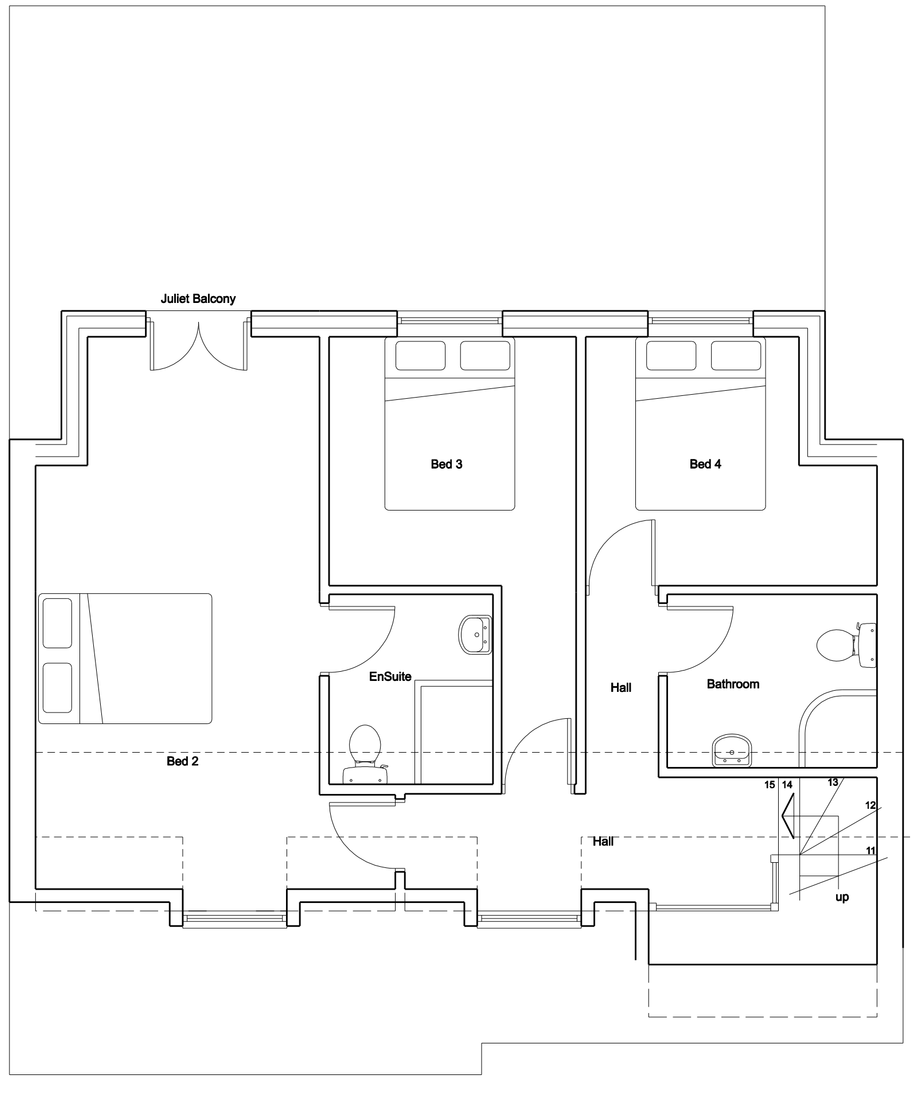
Front Elevation



Rear Elevation



Proposed Ground Floor Plan



Proposed Side Elevation

BEAMS AND STRUCTURE
Engineer's Structural calculations and details are to be provided for all beams, roof, lintels, joists, bearings, padstones and any other load bearing elements before works commence on site. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance, as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

DORMER CONSTRUCTION
To achieve minimum U Value of 0.18 W/m²K
Structure to Engineer's details and calculations. Tiles hung vertically on 25 x 38mm preservative treated battens (vertical counter battens to be provided to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick W.B.P external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to Structural Engineer's details and calculations.
Insulation to be 90mm Celotex GA4000 between studs with 50mm Celotex GA4000 over. Provide vcl and 12.5mm plasterboard over internal face of insulation. Finish with 3mm skim coat of finishing plaster.
All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks within 1m of the boundary to be lined externally with 12.5mm Supalux and 12.5mm Gyproc FireLine board internally to achieve 1/2 hour fire resistance from both sides.

DORMER FLAT ROOF
(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value of 0.15 W/m²K
To Structural Engineer's details. Flat roof covering to be single ply roofing membrane with aa fire rating as specialist specification, with a current BBA or WIMLAS Certificate on 18mm exterior grade plywood, laid on firrings to give a 1:40 fall on 72 x 220mm grade C24 timber joists at 400 centres, max span 5.242m. Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip to give 25mm continuous ventilation, with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a 50mm air gap above the insulation for ventilation. Insulation to be 100mm Celotex GA400 between joists and 60mm under. Provide 12.5mm plasterboard over vapour barrier to the underside of the insulation. Plasterboard to be fixed joists and finished with a plaster skim.
Provide restraint to flat roof by fixing using of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.
Engineer to check construction

TRADITIONAL BALUSTRADES
Balustrades to balcony to be min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

MEANS OF ESCAPE (converting a bungalow)
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms.
The window should have an unobstructed clear openable area that is at least 0.33m² and have no clear dimension less than 450mm high or 450mm wide.
The bottom of the openable area should be not more than 1100mm above the floor.
The window should enable the person to reach a place free from danger from fire.

VENTILATED FLAT ROOF
(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value of 0.15 W/m²K
Flat roof covering to be single ply roofing membrane with aa fire rating as specialist specification, with a current BBA or WIMLAS Certificate on 18mm exterior grade plywood, laid on firrings to give a 1:40 fall on 72 x 220mm grade C24 joists at 400 ctrs, max span 5.242m (see Engineer's details for sizes). Cross-ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation. Insulation to be 150mm Celotex XR4000 between joists and 40mm TB4000 under joists. Provide 12.5mm plasterboard over vapour barrier to the underside of the insulation. Plasterboard to be fixed joists and finished with a plaster skim. Provide cavity tray where roof meets existing wall. Provide restraint to flat roof by fixing using of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.
Structural engineer to check construction

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NOTES:
All dimensions must be checked on site and not scaled from this drawing.
CONTRACTORS PLEASE NOTE:
This drawing must be read in conjunction with any specifications/bills of quantities and related drawings.Any structural work must be carried out to the specification ond requirements of the Structural Engineer and any amendments must have his express prior written authority.
All structural work must be inspected at all relevant stages by the Structural Engineer and Local Building Inspector and comply with their requirements.
Any costs and claims for damages, loss of trade etc, incurred by failing to do so are the sole liability of the contractor.
Any discrepencies between drawings and specification, should be reported to the designer prior to any work commencing.

General:
All work to be carried out strictly in accordance with current Building Regulations and British Standard Codes of Practice.
All new timber to be treated with recommended fungicide and insect repelant to satisfaction of Local Building Inspector.
No projections over boundary.

Foundations:
Foundations to be concrete strip min 225 x 600mm. depth to be determined on site and agreed with Local Building Inspector

D.p.c's:
D.p.c's positioned min. 150mm above ground level. D.p.c. weathercheck to all new window and external door openings. D.p.c cavity tray required over new lintels. Mastic pointing to reveals.

External Walls:
100mm thick Brickwork to match existing outer leaf to Local Authority Approval, 10mm clear cavity, 90mm thick Kingspan Kooltherm K108 wall insulation, 100mm thick blockwork inner leaf. Construction to give min. 0.18W/m K. Stainless steel wall ties to be positioned at 450mm centres vertically and 750mm centres horizontally and at every block course at reveals

Ground Floor:
20mm thick flooring grade chipboard on 175 x50mm C16 s/w timber joists at 400mm centres size to be confirmed by Engineer. 150mm thick Kingspan Kooltherm K103 insulation between joists. Construction to give min 0.18W/m K

Glazing:
Glazing within critical locations as defined in Building Regulations, i.e. within 800mm from floor level or 1500mm in doors to 300mm either side to be laminated or toughened glass to B.S. 6206 and suitably Kite Marked.

Rainwater Goods:
Rainwater goods to match existing.
Surface water to go to soakaway min 5m from building.

Ties:
Every third joist to be tied down by stainless steel ties screwed to joists and plugged to wall min. 450mm down.

Ventilation
Background ventilation to habitable room to be min. 8000mm2. (trickle ventilators in window heads).
Windows to have opening lights min. 1/20th of floor area.

Drainage:
New drains to be vitrified clay pipes with approved flexible joints connected to existing system. Drains to be linteled over where passing under walls and surrounded with pea gravel where passing close to building.

General:
New windows to be PVCu double glazed with low-e glass and 16mm air gap to give average u-value of 1.4W/m2K.
Hardwired smoke detectors to be fitted at all floor levels.
8000mm trickle vents to new bedroom window to give background ventilation.

General:
Lintels/ beams to have min 150mm end bearing.
Thermostatic radiator valves and insulated pipework in un-heated spaces required to any new heating.
Galvanised steel restraint straps required to wallplate at max. 2.0m centres.
Galvanised steel restraint straps required to first floor joists fixed across 3No joists with noggings between at max. 2.0m centres.
Galvanised steel straps required to gables and strapped over 3No rafters with noggings between.
Electrical work to be carried out by an Electrician registered within a Competent Persons Scheme, or if work is to be inspected by a Building Control Officer in accordance with Part P Electrical Safety.
Smoke detectors to be mains operated and battery backup
Code 4 lead tray dpc to abutment.
75% of all new light fittings to be energy efficient.
Part P certificate to be submitted to Local Authority on completion of work.

A		
	Date	Revisions

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Client
Mr & Mrs Hawkes

Project
Proposed Alterations
22 Old Mill Lane
Thurgoland
S35 7AG

Title
Proposed Plans and Elevations

Scale	1:50		
Drawn by	JRH	Date	Dec 2023
Drawing No.	1344-02	Revision	C