

Do not scale off this drawing
All site dimensions to be checked
before work commences.

Roof construction:
Interlocking concrete tiles to match existing installed to manufacturers recommendations on a 25mm fully treated battens on breathable sarking on a built up timber roof structure formed of:
25x100 rafters at 400mm cts.
25x100 purlins
4x125 ceiling joists at 400mm cts.
25x100 ceiling beams
25x100 ridge
25x100 rafters at ridge
25x100 wall plates.
Roof pitch to match existing.
All structural timber to be grade SC3 and marked dry or kiln dry.
Eaves constructed to match existing and existing gutter to be extended in similar design/size gutter with fitting brackets as existing. New rainwater downpipe to be 60mm dia. connected to 110mm dia. UPVC drains bedded on 100mm pea gravel to fall to soakpit min. 1 metre cube at least 5.000 from building.
Install 30x50mm mild steel straps at average 1.000 cts between roof structure and external walls installed at ceiling level and at slope of roof. Straps to extend over 300mm timbers at gable supported by noggings.
Install eaves carrier to breathable sarking at eaves.

Roof insulation:
Install 100mm thick fibreglass quilt between ceiling joists and 150mm thick quilt over joists.

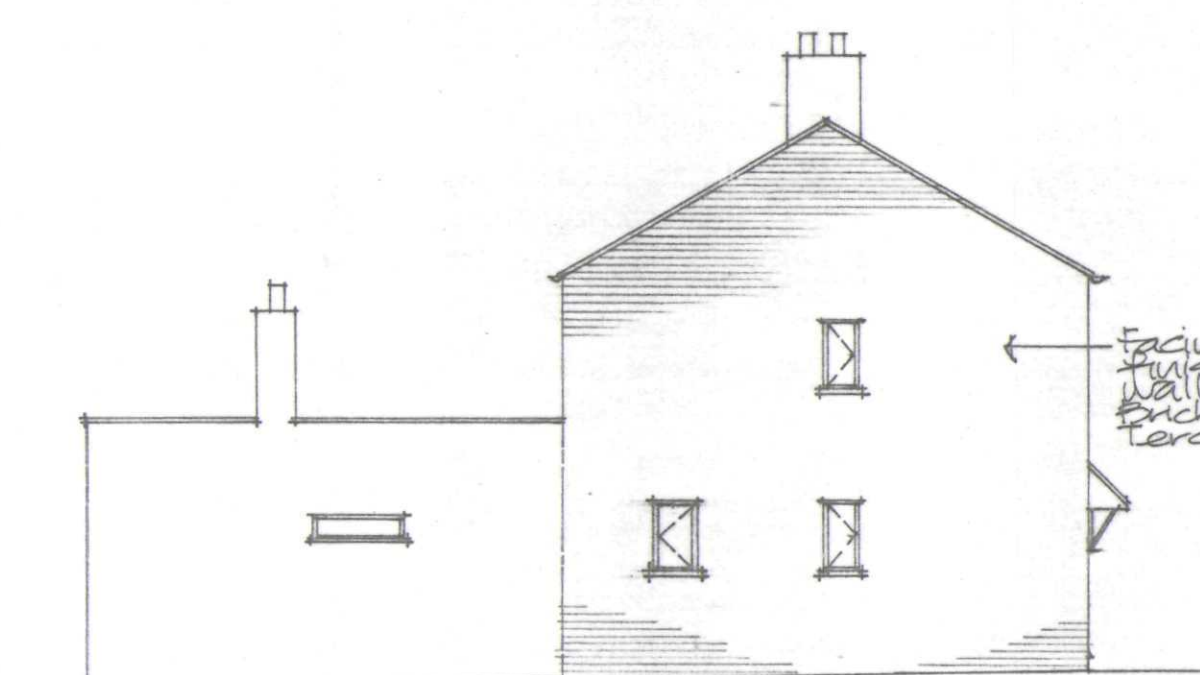
Ceilings:
Install 9.5mm plasterboard with skim or Arter finish to first floor with perimeter supported.
Ground floor ceiling formed of 12.5mm thick plasterboard with skim or Arter finish with all joints and perimeter supported.

Suspended floor:
Formed of 15mm thick moisture resistant T and G flooring grade chipboard on 25x125 joists at 400mm cts. Install 100mm thick fibreglass quilt insulation between floor joists.
Install 30x50mm mild steel straps between suspended floor and surrounding walls installed at average 1.000 cts. Straps to extend over 300mm joists where at right angles supported by noggings.

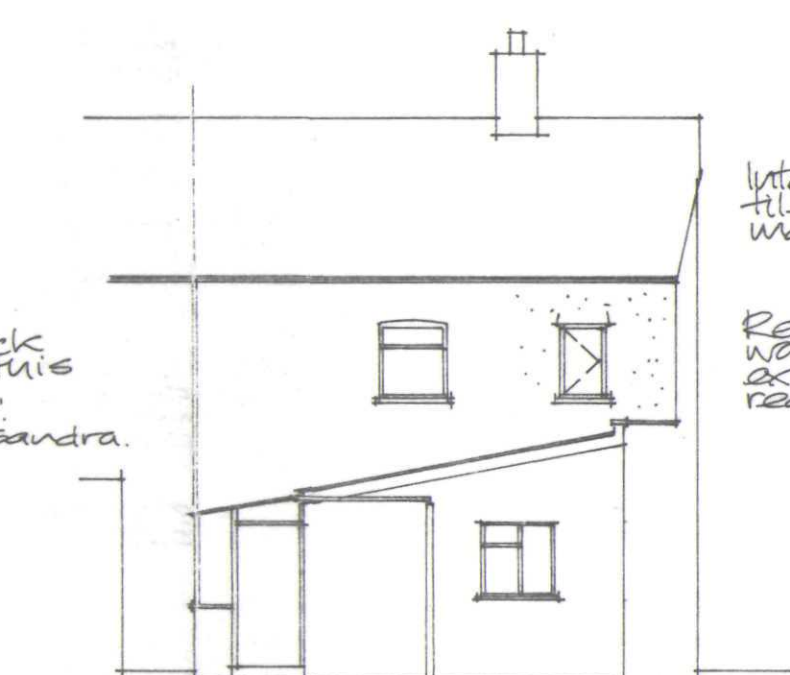
Cavity wall:
Constructed of 103mm thick facing brick to side elevation (100mm thick HemeLite standard block to front and rear with sand/cement 4:1 lean finish). 75mm cavity and 100mm thick 100mm thick inner leaf with dense plaster finish.
Average U value = 0.55 W/m²K.
Install 100mm thick cavity insulation to manufacturers recommendations.
All blockwork below d.p.c. level to be class A.
Install 100mm d.p.c. to walls min. 150mm above ground with drip lapped over.
Install expanded metal render stop at base of external rendering at d.p.c. level.
New walls to be bonded to existing with Furth wall extension profiles.
Install cavity wall ties at 500mm cts horizontally, 450mm cts vertically and at 225mm cts within 225mm of reveals.



FRONT ELEVATION

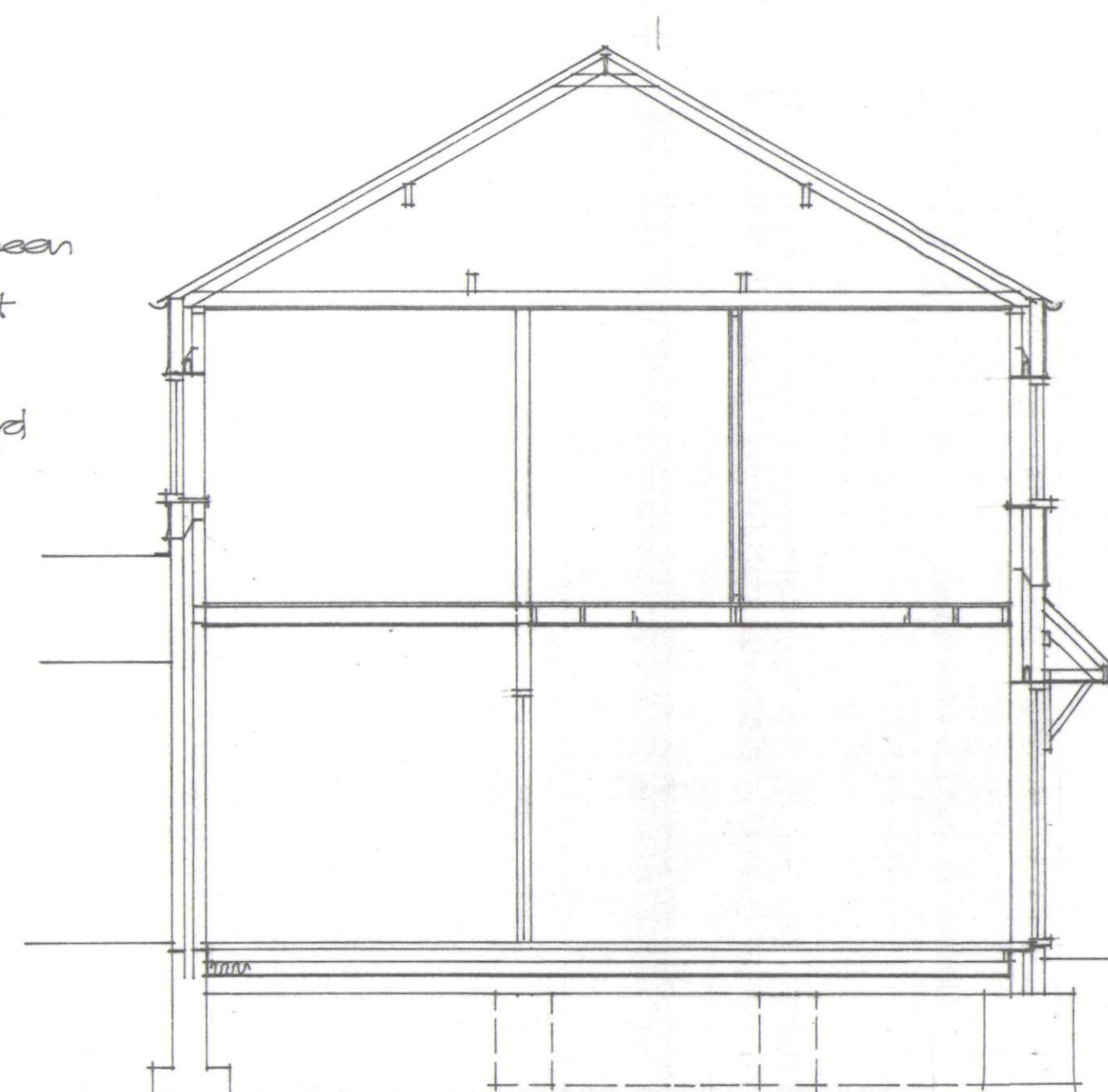


SIDE ELEVATION



REAR ELEVATION

Interlocking concrete tile roof finish to match existing.
Rendered exterior wall finish to match existing to front and rear elevations.



SECTION A-A

Floor construction (ground)

Approx. 50mm thick sand/cement screed on 100mm thick grade 2/3 concrete slab. 100mm thick grade 2/3 concrete slab extended to external walls. 100mm thick hardcore well consolidated and bladed. Install 50mm thick expanded polystyrene insulation to exterior perimeter of concrete slab.

Foundations:
Existing retained foundations to be checked to confirm suitability, and enlarged as agreed on site. New sections of foundation to be 100mm wide grade 2/3 concrete trench fill min. 750mm deep (1.000 in shrinkable soil) depth to be agreed on site with retaining engineer.
Internal foundations to be 450mm wide.

Lintels:
Install 150mm U/175 steel lintels with cavity tray d.p.c. to all new openings through new walls. Install 150mm U/175 steel lintels to 2nd new openings through existing side wall. Install 150mm U/175 steel lintels above 2nd ground floor internal door openings. Install internal 100mm U/175 steel lintels above 2nd en-suite.
Install 150mm U/175 steel lintel 200 above new patio doors from kitchen to conservatory.

Windows and external doors:
Install UPVC window and door frames/doors. All glass to be double glazed with min. 16mm gaps and incorporating Low-E glass to provide min. U value of 2.0 W/m²K. Glass to be safety glass to BS 6200. No window glass within 800mm of floor level.
Install trickle vents to provide min. 800mm² background ventilation to bedroom 2 and dining hall, and 400mm² to en-suites and all openings incl. doors to be draught sealed.

Window schedule: (Approx. sizes)

2nd en-suite	900x1050 deep
1st en-suite	1200x1050
Bedroom 2	1200x1050
Living	1200x1050
Dining/hall	1200x1050
Patio doors	1800x2100

Drains above ground:
40mm dia. polypropylene wastes from shower and bath and 32mm dia. from wash basins with 50mm dia. combined wastes.
Wastes from WC and en-suites to be connected to 110mm dia. UPVC soil and vent stacks within duct with rodding point at base. Vent to stack to terminate at ridge within 1.000m of roof.
Install 150mm deep seal traps to all fittings and 50mm deep cleanable trap to shower tray.

Drains below ground:
Install 110mm dia. UPVC drains bedded and surrounded in 100mm pea gravel to fall at approx. 1 in 60 to connect to existing drain run with new 110mm dia. polypropylene inspection chamber. Drains passing through walls to be built into walls with rockers. Pipes passing through walls to be protected by reinforced concrete slab laid above compressible layer above pea gravel surround.

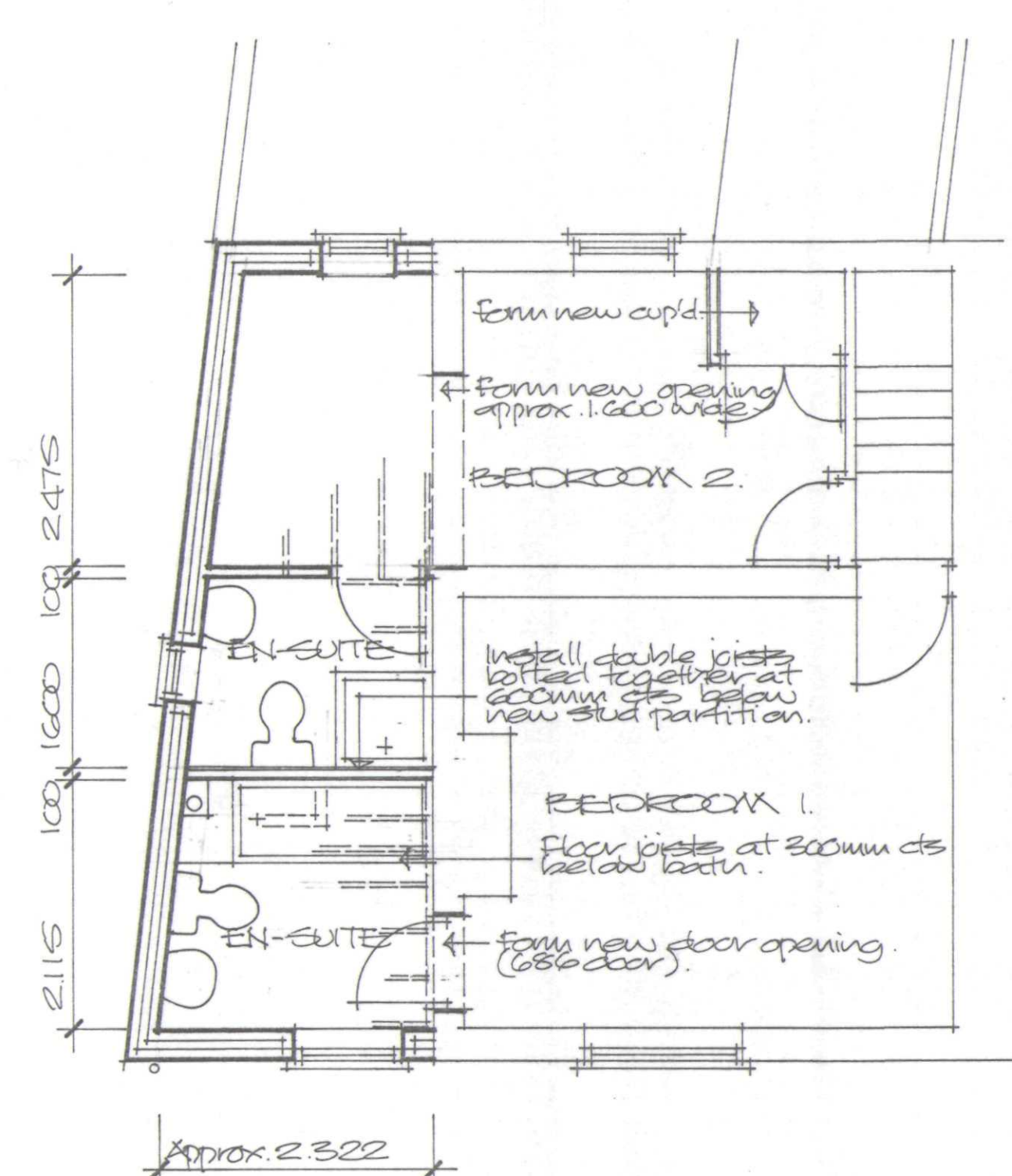
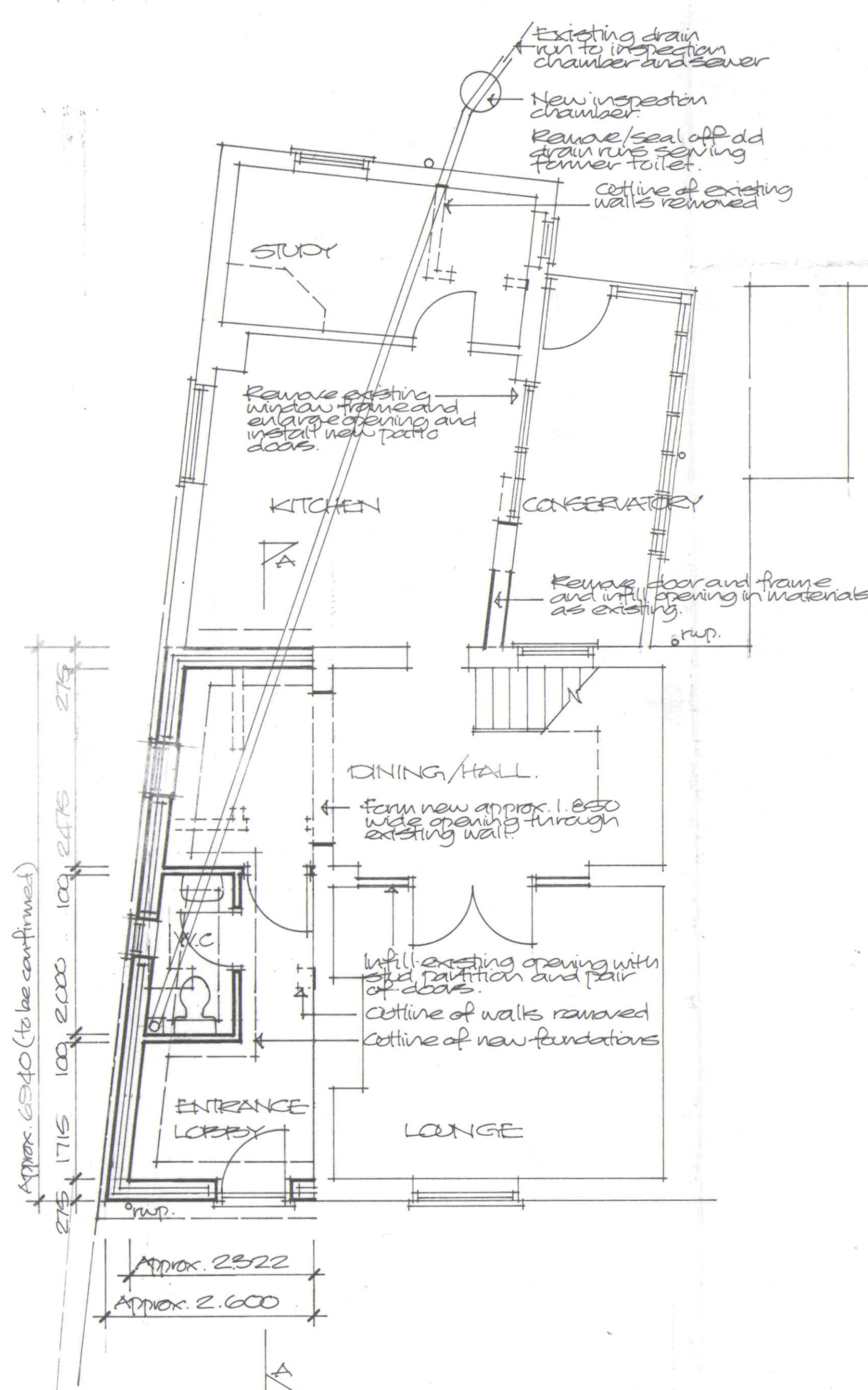
Heating and hot water:
Fix and existing heating and water services into proposal with thermostatic valves fitted to all new radiators. All hot water pipes and unpressurised cold water pipes insulated with 25mm or similar of pipe thickness to match pipe outside diameter.

Mechanical ventilation:
Install extract fan to each en-suite to extract at a rate of 15 litres per second.

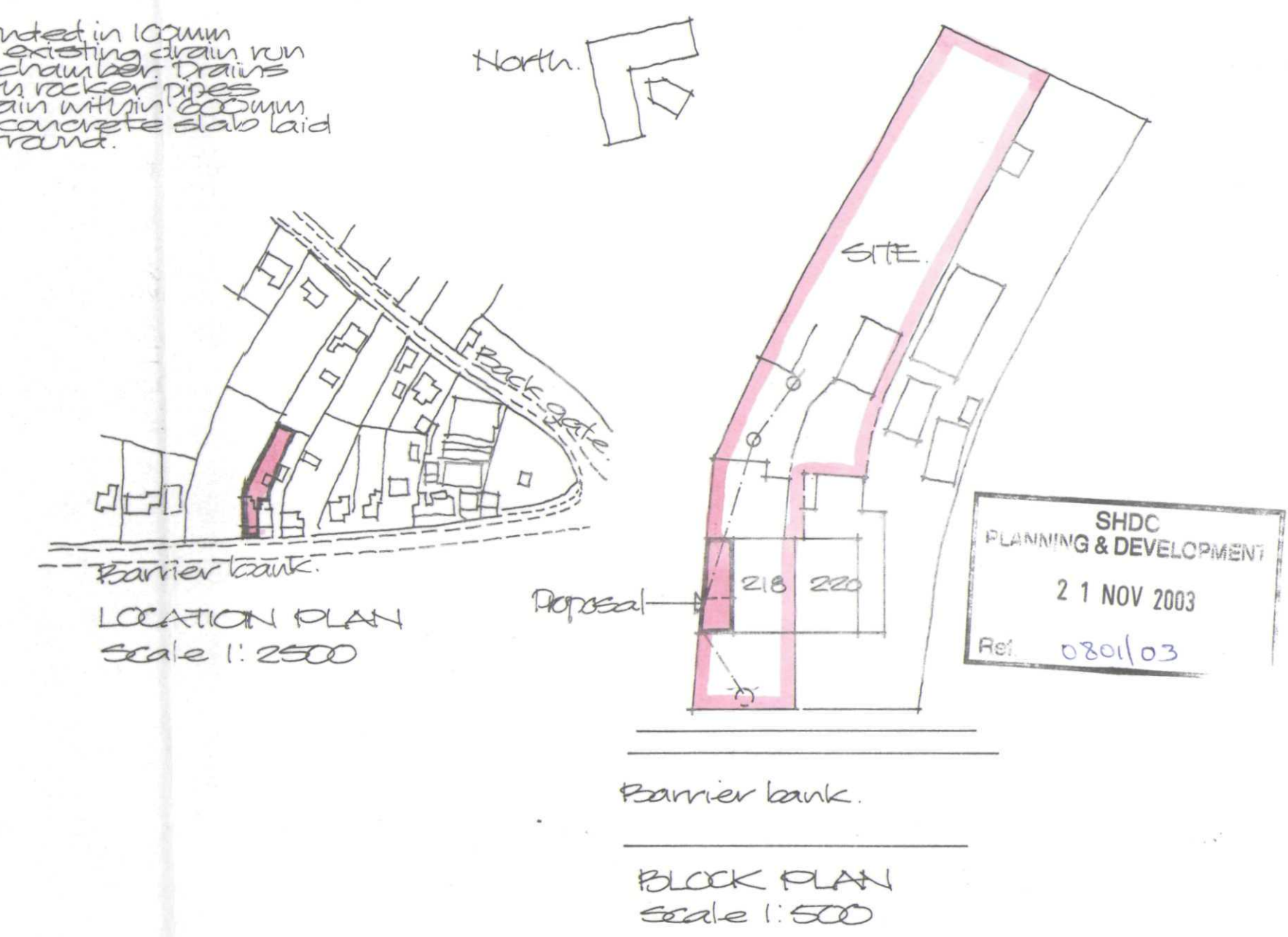
Stud partition:
Constructed of 50x75 studs at 400mm cts with 9.5mm and 12.5mm plasterboard and nogging. 12.5mm plasterboard and skim with fibreglass quilt packing between studs.

Lighting:
At least 2nd new rooms framed to be fitted with low energy compact fluorescent light fittings.

Porch roof:
Form timber framed porch roof with covering of either tiles to match main roof or plain tiles of a similar colour on battens and sarking as main roof. Flashings to be agreed on site.
Install 100mm d.p.c. to top of roof. 100mm d.p.c. to be agreed on site.
Porch roof pitch approx. 4.5°.



AMENDED PLAN
Ref. A1



Project
PROPOSED EXTENSION TO EXISTING COTTAGE 218 BARRIER BANK, COWBIT SPALDING.

ALAN HORNSBY
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Client
MRS & MRS T.M. FOREW

Scale 1:50/1:100
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