Roof construction:

Interlocking concrete tiles to match existing installed to manufacturers recommendations at same pitch as existing on 38x50 fully treated battens on sarking felt on galvanised roof trusses at max 600mm ctrs with raised tile detail to front elevation.

Roof trusses to comply with BS 5268 parts 2 and 3 and roof truss manufacturer.

25x100 longitudinal ties to be installed at ridge and ceiling level. 25x100 diagonal wind braces installed to new gable.

Retain front section of existing pitched roof to garage and build in existing gables to new front wall to retain existing truss ceiling joists and provide support from new suspended floor.

Re-use roof tiles to front elevation and most of rear elevation.

Eaves construction to be similar to existing and to incorporate roof void ventilation to provide min. 25,000mm² per metre. Allow in carpenters roof void ventilation at ridge to provide min. 5,000 mm² per metre.

Verge construction to match existing.

All structural timber to be grade SC5 and marked dry or kiln dry.

Gutters and downpipes:

New rainwater pipes and downpipes to match existing with new rainwater hopper at ground level connected to existing storm water drains or falcon to new soakpit min 1 metre cube at least 5,000 from building. Any new storm water drains to be 110mm dia. Upvc bedded on 100mm pea gravel to fall to soakpit.

Lateral restraint:

Install 30x5mm mild steel straps at average 1,800 ctrs between roof and perimeter walls and between suspended floor and perimeter walls. Straps to be installed at ceiling level and at slope of roof. Straps to extend over two timbers where at right angles supported by noggings.

Roof insulation:

Install 1 layer of 100mm thick fibreglass quilt insulation between ceiling joists and 1 layer of 150mm thick quilt over joists. Install 200mm thick fibreglass quilt between rafters to sloping section with min. 50mm ventilation gap over. Maintain vent gaps over insulation at eaves.

Ceilings:

Maintain if possible existing ceiling to ground floor. New support wall between garage doors to pass through existing ceiling to support new lintels supporting front wall of extension.

New first floor ceilings to be 12.5mm plasterboard with all joints and perimeter supported and Artex finish.

Make good existing first floor ceiling where partition removed.

Suspended floors:

18mm thick T & G flooring grade chipboard (moisture resistant) on 195x50 joists at 400mm ctrs supported on inner wall of garage extension up to wall plate and on joist hangers on external walls. Install solid strutting to joists at mid span.

Partition between garage and study to be supported on joists, this partition supported by existing ground floor wall.

Install 200mm thick fibreglass quilt between bedroom floor and ceiling of garage.

Cavity walls

105mm facing brick, 75mm cavity and 100mm thick Thermalite standard blocks with internal finish of 9.5mm thick plasterboard and skim on dabs.

Install 75mm thick Dritherm insulation batts installed to manufacturers instructions.

Average 'U' value better than 0.35w/m²K.

Alternative internal finish to be dense plaster.

Install cavity wall ties above new windows in gable and where possible above ground floor lintels where exposed.

Install preformed cavity tray dpc to reveals with frames lapping by min. 15mm.

Wall ties to be installed at average 900mm ctrs horizontally 450 mm ctrs vertically and at 225mm ctrs within 225mm of reveals.

Internal skin of new walls bonded to existing with Fixfix wall extension profiles, external skin to be fully bonded to existing.

Lintels

Install IG type LI/575 steel lintels to small window openings to WC, bathroom and hallway and en-suite windows.

Install IG type LI/HD/150 steel lintels to large master bedroom window and over garage supporting front wall of extension.

Install cavity tray dpc to reveals with frames lapping by min. 15mm.

Wall ties to be installed at average 900mm ctrs horizontally 450 mm ctrs vertically and at 225mm ctrs within 225mm of reveals.

Internal skin of new walls bonded to existing with Fixfix wall extension profiles, external skin to be fully bonded to existing.

Lintels

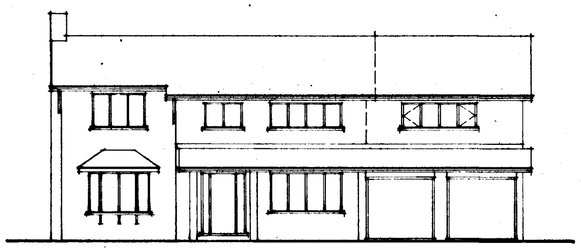
Install IG type LI/575 steel lintels to small window openings to WC, bathroom and hallway and en-suite windows.

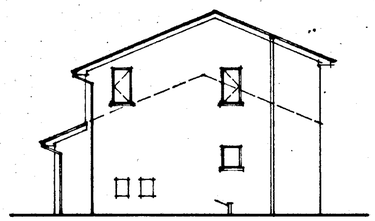
Install IG type LI/HD/150 steel lintels to large master bedroom window and over garage supporting front wall of extension.

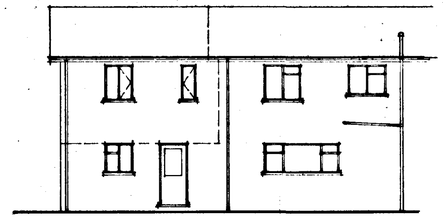
Install cavity tray dpc to reveals with frames lapping by min. 15mm.

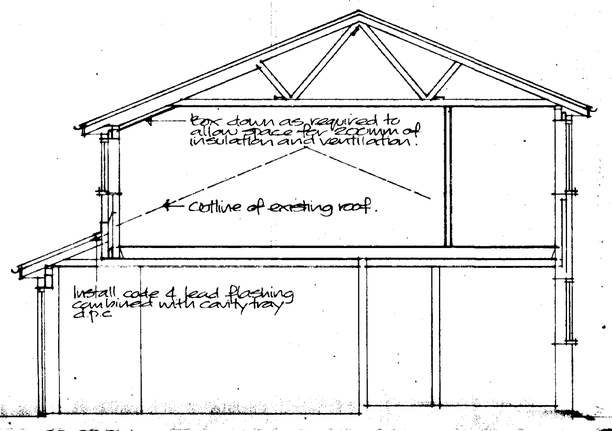
Wall ties to be installed at average 900mm ctrs horizontally 450 mm ctrs vertically and at 225mm ctrs within 225mm of reveals.

Internal skin of new walls bonded to existing with Fixfix wall extension profiles, external skin to be fully bonded to existing.









SECTION

Windows:

White UPVC window frames to be double glazed with sealed units with min 16mm gaps and incorporating Low E glass to give min U value of 2.0 w/m²k.

All opening lights to be straight sealed.

Cills within 800mm of floor level.

Opening lights to master bedroom to provide min. 1/20th of floor area for main ventilation.

Install trickle vents to provide min. 8000mm² background ventilation to bedroom and 4000mm² to en-suite and wet areas.

Suitable fire exit window installed to bedroom.

Drains above ground:

Install 40mm dia. polypropylene waste from wash basin and shower with 50mm dia. dombinded waste.

Install 75mm deep seal trap to wash basin and 50mm deep seal trap to shower.

All waste pipework to connect to new 110mm dia. UPVC soil and vent stack with top at least 300mm above window head level.

Drains below ground:

New soil and vent stack to have rodding point at base and to connect to 110mm dia. UPVC drains bedded and surrounded in 100mm pea gravel to fall at 1in 40 and connect to existing foul drain with new inspection chamber at a point where new inspection chamber and location of existing drains to be confirmed and location of inspection chamber to be agreed on site with L.A. building inspector.

Heating and hot water:

Existing systems to be extended with thermostatic valves fitted to new radiators. All new hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Mechanical ventilation:

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

Lighting:

At least 1 room to be fitted with fluorescent light fitting (either fluorescent tubes or compact fluorescent fitting).

Stud partitions:

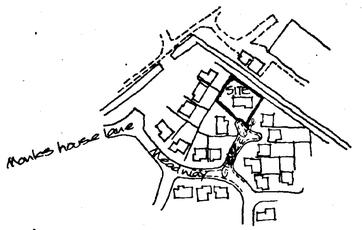
Constructed of 50x75 studs at 400mm ctrs with 50x75 sole and head plates and noggings at 1200 ctrs clad both sides with 12.5mm plasterboard and skim and with fibreglass packing between studs.

Finishes:

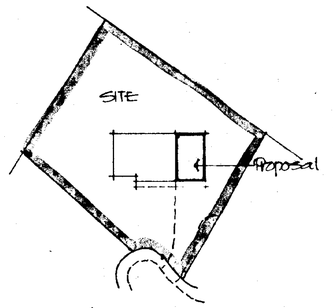
Roof: Interlocking concrete tiles to match existing at approx. 22½°

Walls: Facing brickwork to match existing fully bonded to existing.

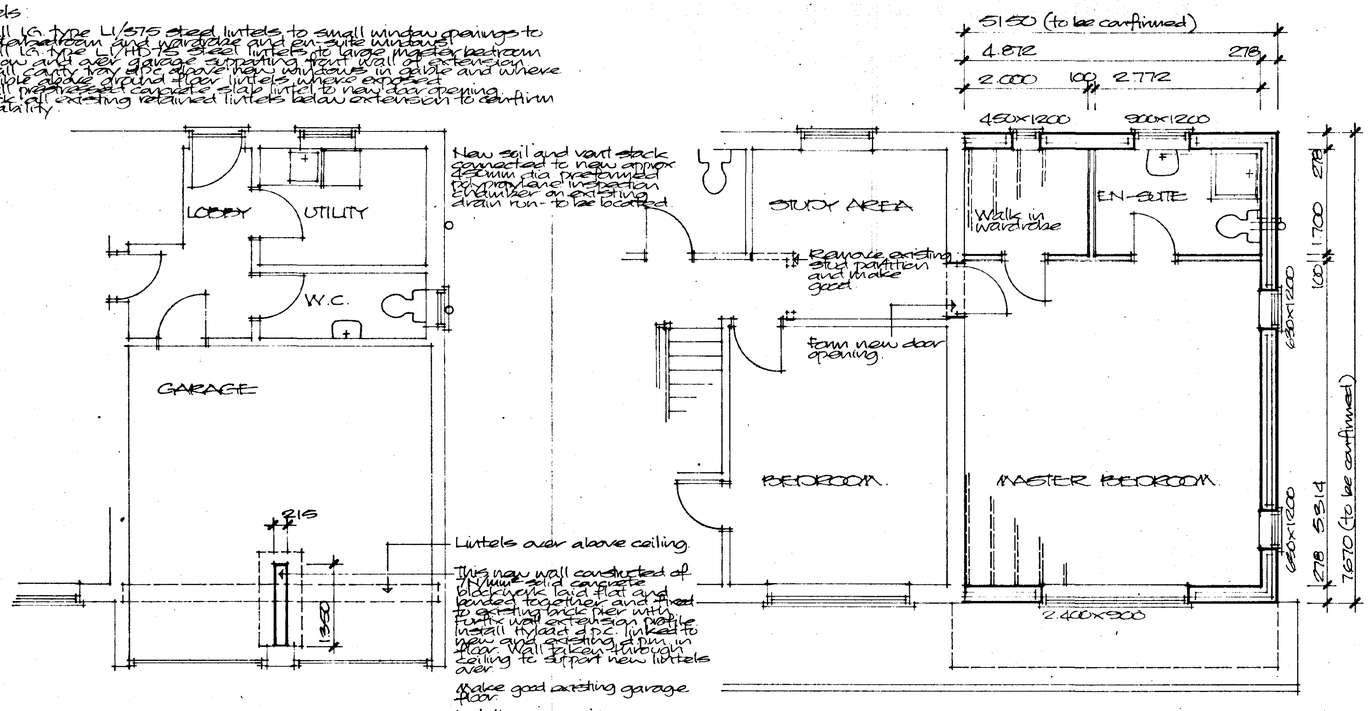
North



LOCATION PLAN Scale 1:2500



BLOCK PLAN Scale 1:500



DETERMINED PLAN

SHDC
Planning & Development
17 DEC 2002
Ref 13/81/02

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Project
PROPOSED EXTENSION TO EXISTING HOUSE 2 GLEBE CLOSE, SPALDING

Client
MR & MRS R. BAGGALEY

Scale 1:50/1:100 Date Dec. 02