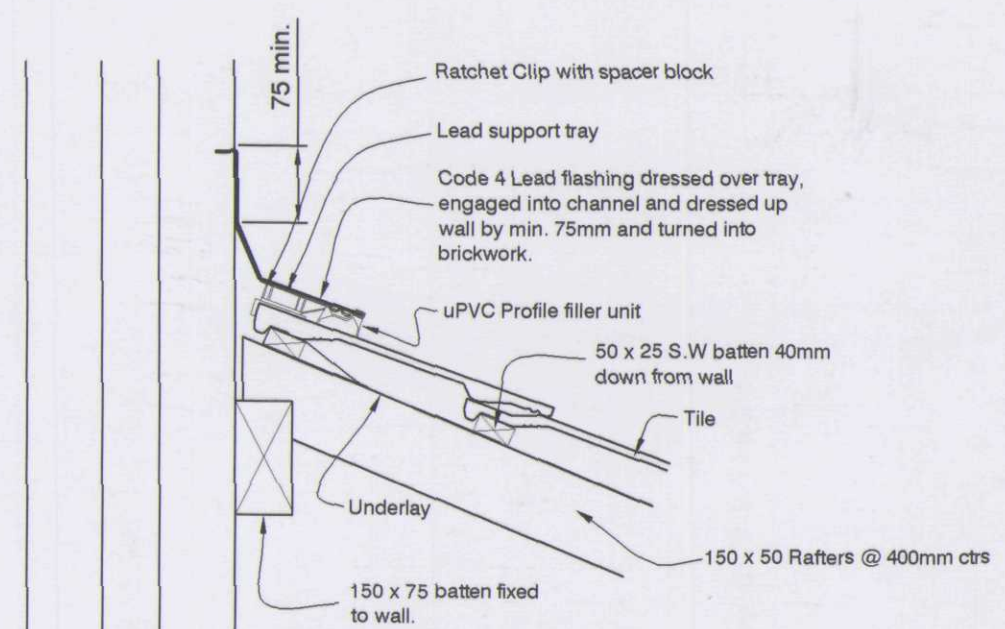




TYPICAL ROOF TOP ABUTMENT DETAIL
Not to Scale

Note: The detail shown is a typical constructional method to provide the roof space with 5000mm² at the top edge. This detail should be adapted to suit specific site conditions and always to the satisfaction of the Building Inspector.



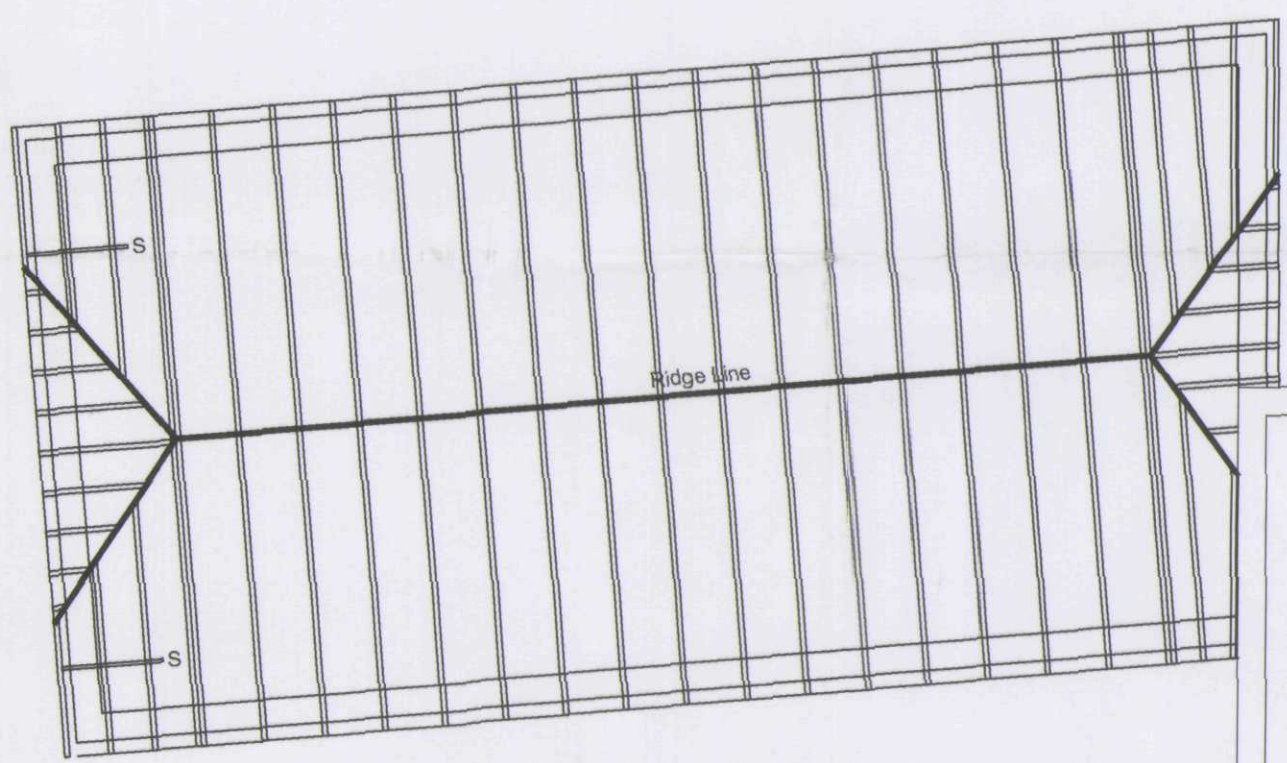
Ladder frames to be fixed direct to last truss at 400mm ctrs.

Solid pack void between last rafter and blockwork with mineral fibre insulation.

Pre-fabricated Attic Trusses to be fixed plumb (max. deviation 25mm) at max. 600mm ctrs. Roof construction to be designed strictly in accordance with BS5268 Part 3: 1985 and to specialist manufacturers design drawings. Calculations to be submitted to the L.A. building inspectors approval prior to any materials being placed on order.

All 25x100 diagonal and longitudinal wind bracing and chevron bracing to be free from all major defects and any weak points and fixed all in accordance with manufacturers details. Lap joints (if required) to be taken over 2nd trusses all in accordance with BS5268 Part 3: 1985. Bracing to be fixed with 2no. 3.35 x 65mm galvanised round wire nails at each cross over and to be fixed as close to the truss node points as possible.

30x5 m/s straps (S) over 3no. trusses at max 2m ctrs to gable ends and ceiling level. At least 1no. gable strap to be within 500mm of ridge. Fit solid noggings to suit truss depth at all strap positions and between end truss and wall face.



Bracing left out for clarity

Note: provide 50x50 timber noggings for partition head fixing and pendant light fixings. position of light fixings to be agreed on site with client.

PROPOSED ROOF PLAN
Scale 1:75

NOTE: MANUFACTURER'S DETAILS & CALCULATIONS TO BE FORWARDED TO SHDC'S BUILDING CONTROL OFFICER FOR APPROVAL AT LEAST 21 DAYS PRIOR TO FIXING ON SITE

PROPOSED INTEGRAL FLOOR JOISTS SPECN

Solid herringbone strutting @ mid point to spans over 2m. Strutting at third points to span over 4m.

Provide solid blocking at the ends of herringbone strutting and under straps between last joist and wall.

Lay 22mm Weyroc Tongue and Grooved flooring grade wood particle boarding or equal approved on top of first floor joists with staggered joints.

30x5 m/s anchor straps (S) @ 2m ctrs with solid strutting beneath. Note: straps into minimum 3no. joists and fix with two nails.

ROOF INSULATION

Roof to achieve a U' value of 0.18W/m²K by using 2no. layers of 75mm Celotex Tuff-R GA300Z rigid insulation board fixed between rafters on timber noggings fixed securely to sides of each rafter with 12.7mm Duplex plasterboard Celotex boarding & noggings to be fixed, cut and installed strictly in accordance with manufacturers instructions and the brief description with Building Control Specification.

ROOF VENTILATION

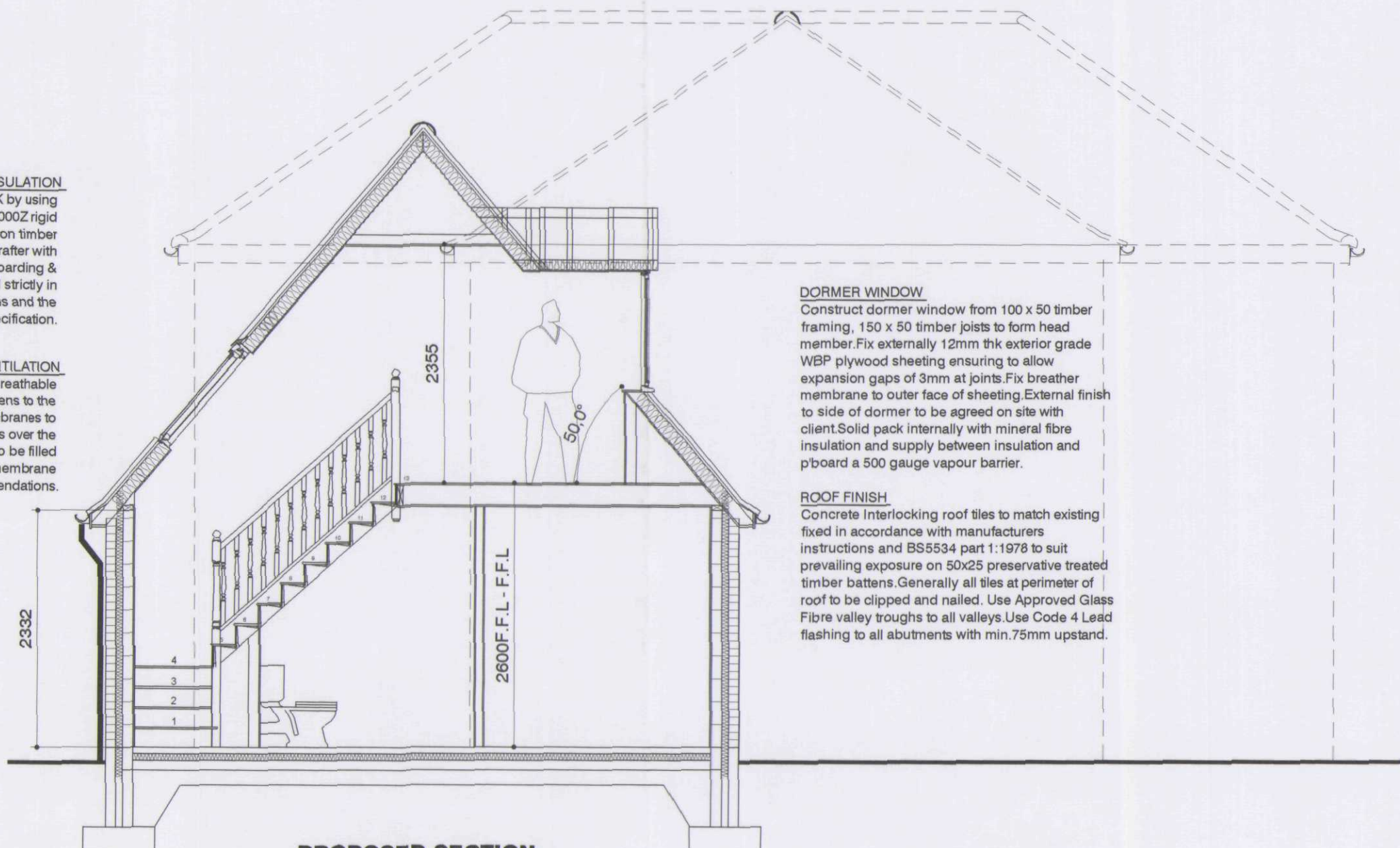
Install 'Tyvek' or similar approved Breathable membrane over rafters by either fixing battens to the sides of the rafters and allowing the membranes to sag between or by fixing counter battens over the membrane leaving the entire rafter depth to be filled with insulation, all in accordance with the manufacturers recommendations.

DORMER WINDOW

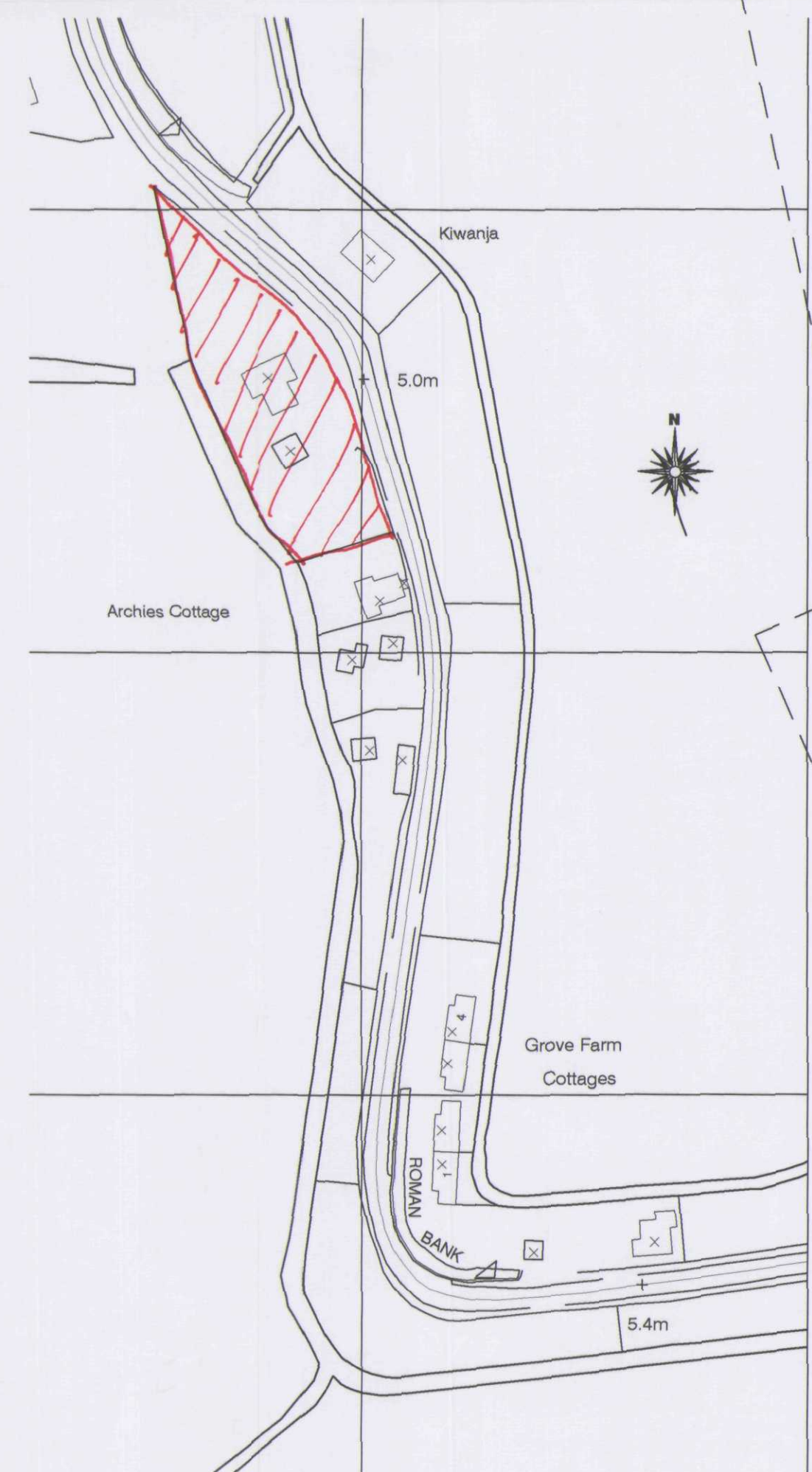
Construct dormer window from 100 x 50 timber framing. 150 x 50 timber joists to form head member. Fix externally 12mm thk exterior grade WBP plywood sheeling ensuring to allow expansion gaps of 5mm at joints. Fix breather membrane to outer face of sheeling. External finish to side of dormer to be agreed on site with client. Solid pack internally with mineral fibre insulation and supply between insulation and pboard a 500 gauge vapour barrier.

ROOF FINISH

Concrete interlocking roof tiles to match existing fixed in accordance with manufacturers instructions and BS5534 part 1:1979 to suit prevailing exposure on S025 preservative treated timber battens. Generally all tiles at perimeter of roof to be clipped and nailed. Use Approved Glass Fibre valley troughs to all valleys. Use Code 4 Lead flashing to all abutments with min. 75mm upstand.



PROPOSED SECTION
Scale 1:50



SITE PLAN
Scale 1:250

ROOF INSULATION BETWEEN RAFTERS (UNVENTILATED)

Installation to be strictly in accordance with Celotex's instructions which are briefly described below:

- Install breather membranes over rafters by either fixing battens to the sides of the rafters and allowing the membranes to sag between the rafters or fixing counter battens over the membrane leaving the entire rafter depth to be filled with insulation. All in accordance with the membrane manufacturer's recommendations.
- Measure the space to be filled between the inside face of the rafters prior to cutting board.
- Cut tufr-R at a slight angle, making the board width slightly oversize on one surface, to achieve a friction fit.
- Push the boards into the void between the rafters until tight up to the battens or the membrane, ensuring that lateral joints are closely butted.
- Cut and fit second layer as above and push tight up to the underside of the first layer.
- Fit tightly to ridge plate and carry over or tightly butt wall plate at eaves.

Complete the internal finish by the use of 15mm plasterboard.

A vapour control layer should be installed to the underside of the rafters. Vapour check plasterboard or a separate polyethylene sheet is recommended for higher humidity areas such as kitchens and bathrooms.

HEATING SYSTEM

Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m.K and a thickness equal to the outside diameter of pipe upto max. of 40mm. It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 252 2002 Edition.

GENERAL CONDITIONS

Contractors are responsible for checking all dimensions on site when work commences and before ordering any materials. Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.

All details shown are based on typical site conditions for that area, any abnormal conditions should be brought to the attention of the Client and Local Authority.

The notes shown are mainly to cover the requirements of Building Regulations and should not be treated as full specification.

No allowance has been made for any Structural Calculations, a "SAP" calculation, Soil Investigation or Flood Risk Assessment. If deemed necessary then these will be a chargeable extra. All steel beam sizes shown on drawing are all subject to confirmation from Structural Engineer.

All materials not specified to be of a standard suitable for the work proposed and be fit for purpose. All work to be in accordance with good building practice and all necessary BS codes for Workmanship on Building Sites.

REV DESCRIPTION:
SUPERSEDED

remway design Ltd

Plans drawn for: Local Authority - Planning permission & Building Control.

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Project: **Proposed Family Room & Study 2-Storey Extension**

Client: **Mr & Mrs Sharmah
Roman Bank
Holbeach Hurn
Spalding**

Date: **Feb04** DRG No.: **MS02** REV: