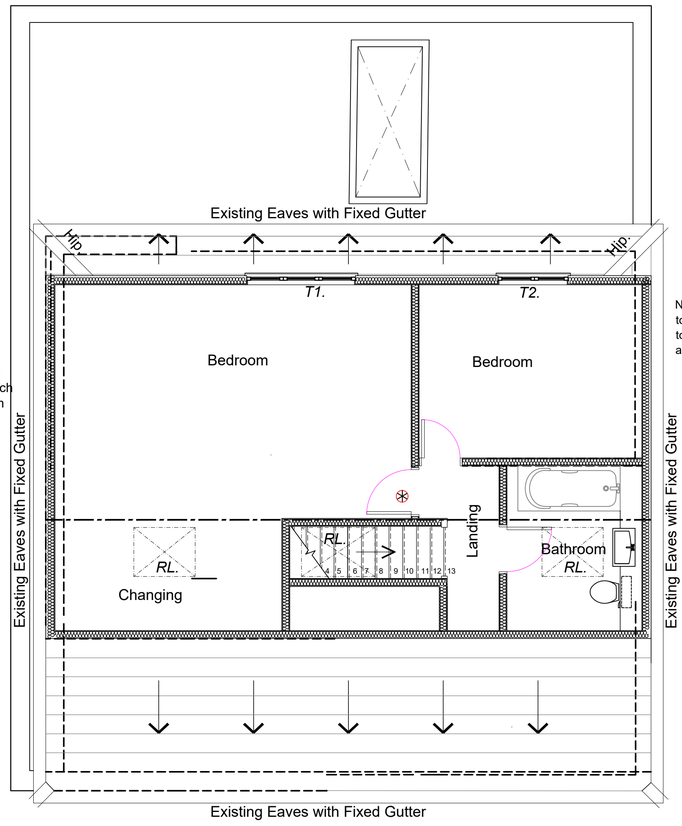
Windows to all new bedrooms to be provide means of escape min 0.33sqm. openable area with no part less than 450mm wide/high and cill located 800 to 1100mm off FFL.

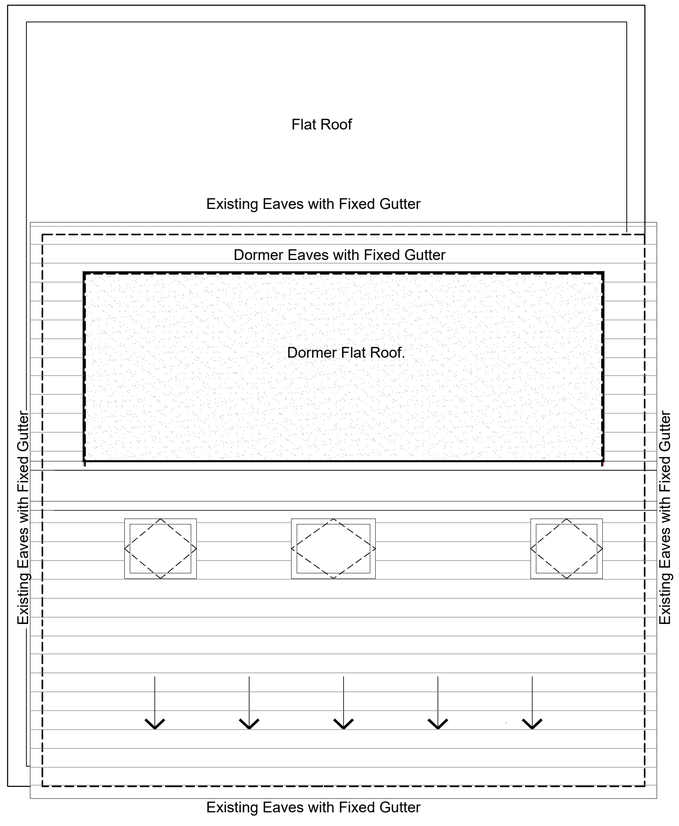
New partitions to be 50x100braced load bearing timber studs at 400crs faced each side with 12.5mm plasterboard and skim finish, Acoustic insulation provided by 50mm thick Rockwool RWA 45.

Form new staircase from First Floor, enclosing walls to provide 1/2 HRFR & all doors to habitable rooms to provide a minimum a min FD20.




New waste pipes and soil pipe to new Shower Room and En Suite to be connected to the existing soil and vent pipe.

SECOND FLOOR LAYOUT as PROPOSED scale 1:50.

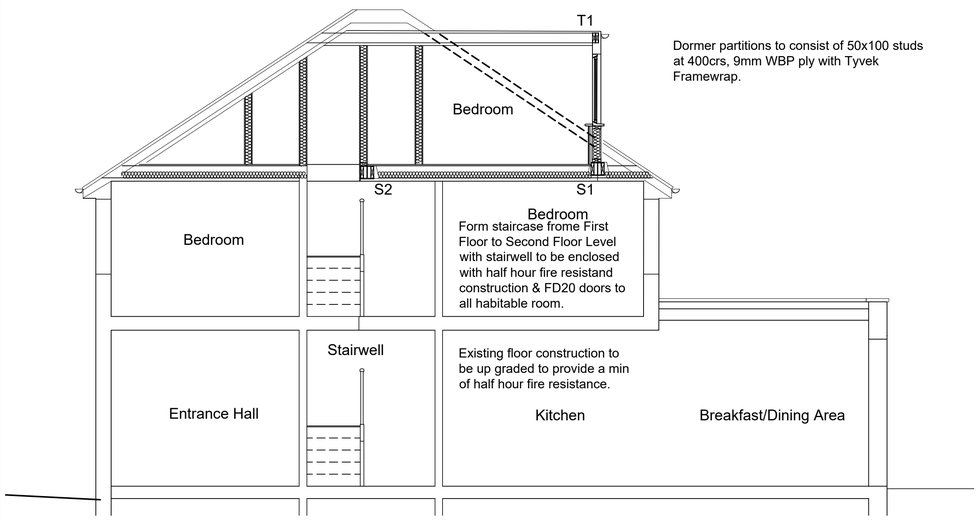



The flat roof construction to consist of 3 Layers of built up felt to BS747 on dormer flat roof on 18mm WBP ply decking on treated sw firrings laid to fall 1 in60, on 50x200 roof/ceiling joists at 400 mm crs. Fix 150mm Kingspan insulation between the joists. Ensure 50mm gap is maintained over insulation. Fix 32.5mm Kingspan insulation and plasterboard to form ceiling.

Form hip to gable roof in concrete plain tiles to match existing in colour and texture.

ROOF LAYOUT as PROPOSED scale 1:50.

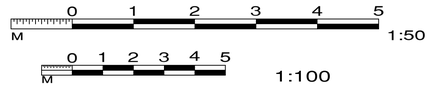
The Dormer flat roof construction to consist of 3 Layers of built up felt to BS747 on dormer flat roof on 18mm WBP ply decking on treated sw firrings laid to fall 1 in60, on 50x200 roof/ceiling joists at 400 mm crs. Fix 150mm Kingspan insulation between the joists. Ensure 50mm gap is maintained over insulation.
Fix 32.5mm Kingspan insulation and plasterboard to form ceiling.




Dormer partitions to consist of 50x100 studs at 400crs, 9mm WBP ply with Tyvek Framewrap.

LONGITUDINAL SECTION as PROPOSED scale 1:50.

SCALE BARS




LEGEND

- LE — 4-pin CFL low energy light fitting in lampholder - luminous efficiancy greater than 40 lumens per circuit-watt.
- LE — Wall light fitting or external bulkhead light fitting with 4-pin CFL low energy lamp or light fitting with PIR daylight detector
- S — Mains- operated smoke detector to BS 5839: part 1 interconnected and wired to seperate fused circuit at distribution board
- HD — Mains-operated heat detector
- Mechanical extract fan or Cooker Hood both ducted to discharge to external air.
- Direction of Joist span.
- F20D Half hour fire resistant doors to all habitable rooms of stircase enclosure.

VOLUME CALCULATIONS.

**CONSTRUCTION NOTES.**

**EXISTING WALLS, LINTELS, BEAMS AND FOUNDATIONS :**
Prior to commencement of works all existing walls (assumed to be load bearing) existing lintels/beams and foundations are to be exposed by contractor to determine their adequacy to carry increased loads and report any deficiencies to the Structural Engineer to redesign as necessary.
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**STEEL BEAMS :** Refer to the Structural Engineers calculations for the design and specification of all steelwork and padstones/spreader plates. All beams to have a minimum 150mm end bearing, where two steel sections used together they are to be bolted together to structural engineers details. All sections are to be finished with two full coats of red oxide paint, and encased with 25x38mm softwood cradling at min 450mm crs securely wedged/TEK screwed to the flanges, with 2No layers of GYPROC plasterboard with staggered joints and 15mm lightweight plaster finish to provide a minimum half hour fire resistance.Any external steelwork is to be tightly packed with ROCKWOOL insulation to prevent cold bridging.

**AIR TIGHTNESS**
The construction is to comply with Building Regs relating to air leakage from the structure as following;
i) Care to be taken to ensure all blockwork joints are flushed up with mortar leaving no gaps, where required any gaps to be sealed with propriety expanding foam sealant.
ii) Junctions of all doors and window frames with brickwork interfaces are to be sealed continuously gun applied mastic to manufacturers recommendations.

**STRUCTURAL TIMBER :**All structural timbers are to be grade C16 pressure impregnated with preservatives. All new structural timbers are to be connected using Simpson Strongtie Jiffie hangers and BAT straps etc, all fixed to the manufacturers recommendations. Where timbers are bolted together they are to bolted together using M10 steel bolts with washers and 51mm dia double sided toothed timber connectors.
Inspect the existin ceiling joists and if overspanned replace with 47x195mm C24 Ceiling joists at 400mm crs, rafters to be fixed to timber wallplates with galvinised MS truss clips. Use 30x5x1200 long galv'd MS restraint straps fixed at 1000mm crs. over 50x100 wallplate. Provide 2No lateral restraint straps to the gable.

**PROTECTION of DRAINS** : All new concrete foundations to stop min 600mm clear of any public sewer as required by THAMES WATER AUTHORITY and 200mm clear of any other drains. Provide concrete lintels with 100mm clearance over all drains passing through walls or foundations. Alternatively where passing through foundations encase with 100mm polystyrene and place 3No T16 bars over.

**SURFACE WATER DRAINAGE :** 100mm dia drains with flexible joints, with bed and surround in 150mm pea shingle, laid to 1 in 60 fall to be connected to the existing drainage system, where this is not possible the drain should lead to a soakaway located a minimum of 5.0m from any building foundation and designed and constructed in accordance with BRE Digest 365 . All rainwater goods to be to BS5572, 100mm half round upvc gutter and 63mm dia downpipe into below ground bottle gulley.

**ELECTRICAL WORK:** All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to the by the owner to Building Control Department.
Energy Efficient Lighting : Fixed internal lighting in the extension must be not less than 75% of all the fixed low energy light fittings (fixed lights or lighting units) in the main dwelling rooms, fitted with lamps which must have a luminous efficiency greater than 40 lumens per circuit-watt and a total output greater than 400 lamp lumens.

**ROOF LIGHTS :** To be Velux or similar, the final size and position to be agreed on site, the roof is to be trimmed around the roof lights using double rafters both sides and bolted together as specification. All flashings/soakers are to be fitted strictly to the manufacturers instructions with glazing to achieve a U value of 1.8W/m2 K.

**DOORS AND WINDOWS**
a)New rear patio door to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass.
b)New windows are to be double glazed with 16mm argon gap and soft coat low -E glass. Window Energy Rating to be Band C or better and to achieve a U-value of 1.6 W/m²K.
c) Where installed safety glass shall be to BS6206, and to be fitted in critical locations as listed below :
Lower level glazing between finished floor and 1500mm above that level side of doors. Cill height of all windows should be no less than 800mm above floor level.
d) All window and door frames are to be set back to overlap the insulated cavity closer by a minimum of 30mm in accordance with robust details.
e) Trickle ventilation to all habitable rooms to provide a minimum of 5000sq mm, with all other rooms being provided with 3500sqmm.

**CEILING/ROOF.**
a) Flat roof rear extension to be 47x195 (C24) timbers at 400mm crs (galv'd MS joists hangers) on to 50x100 wallplate on inner line of blockwork and set in place using Galv'd truss clips. Insert 50x50 sw noggings between the rafters to edge of rooms and all plasterboard joints.
At wall abutment fix 50x100 timber wallplate bolted to wall using M12 Chemfix bolts at 600mm Crs to prevent spread using Simpsom Strong Tie joist hangers or similar approved.
b) Roof to be insulated using 120mm Kingspan Kooltherm K7 insulation laid between joists ( sealed to rafters with expanding foam) and 32.5mm Kingspan Kooltherm K18 with VCB, 12.5mm plasterboard to the underside of the joists to achieve a U value not exceeding 0.2W/m2K.
c) Ceiling to be 12.5mm thick Knauf wallboard with all joints taped and filled to be decorated.
d) The ceiling joists are to be laid as indicated on the section, with the 50x100 timber wallplate fixed to the wall using 3x35 Galv'd MS L straps at max 1.0m crs. Vertical leg 900mm long to be plugged and screwed to the inner face of studwork.
e) Provide 3x35 restraint straps fixed perpendicularly over 3No ceiling joist and down the inner face of wall to the verge at max 1.8m crs
f) Main roof to form verge using plain to be concrete tiles to match existing over treated sw battens over one layer of Tyvek Supro breathable membrane over 50x150 C25 Rafters bolted to the existing rafters at max 400crs.

**HEATING**
Extend the heating system from existing and provide new TVRs to radiators, where instructed a new boiler to be located to allow boiler flue to to be ducted to the external wall/roof. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorites bye laws, Gas safety requirements and IEEE regulations.
Radiators to be fitted as indicated/directed by Client on site.

| Rev | Description | Date |
|---|---|---|


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Client
MR R. KINSEY.

Site
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LONDON, SW14 8RU.

Drawing Title
FLOOR PLANS and ELEVATIONS as PROPOSED

| Scale | Date | Drawing Status |
|---|---|---|
| 1/100 @A1.<br>1/50 @A1. | Dec 2021. | PLANNING |

Drawing Number 006/134A - W02 Rev .