NOTE:
Provision to be made for new drainage. Proposed is to be connected to existing drainage system.

NOTE:
Exact runs of existing storm & foul drainage to be located on site. New RWP to be connected to existing drainage system or soakaway.

NOTE:
All existing foundations to be determined on site.

NOTE:
Kitchen, Utility and W.C layouts and fittings all to be agreed with client prior to commencement.

Grass

NOTE:
Decking to be taken up and removed from site. Lay new landscaping in agreement with the client. Extent to be agreed on site.

New UPVC window & Doors & window combination installed to client's spec. Exact sizes and fenestration to be agreed with client prior to order.

Proposed RWP installed and connected to existing drainage system or new soakaway as notes.

Existing Conservatory, walls and slab removed and carted away. Make safe services prior to new works.

Proposed 303mm wide masonry wall. 100mm internal blockwork, 100mm insulated cavity & 103mm External facing brickwork on 600mm wide footings under

Existing walls removed and new structural steel work installed as SE's design. Allow to alter services to suit.
Nb. Steels to be installed as high as possible.

Existing Utility wall and door removed and new stud partition with door and frame to client's spec installed.

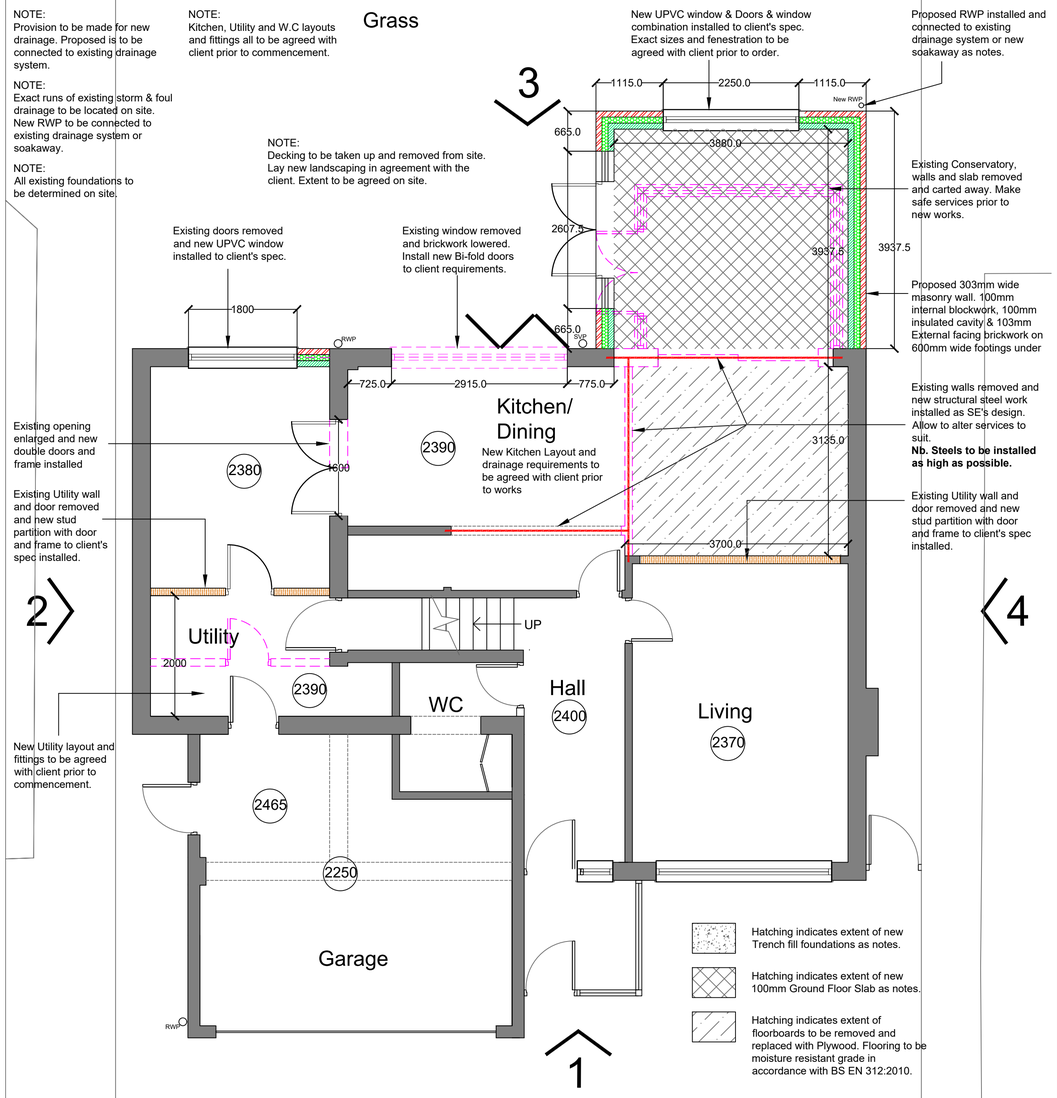
Existing doors removed and new UPVC window installed to client's spec.

Existing window removed and brickwork lowered. Install new Bi-fold doors to client requirements.

Existing opening enlarged and new double doors and frame installed

Existing Utility wall and door removed and new stud partition with door and frame to client's spec installed.

New Utility layout and fittings to be agreed with client prior to commencement.



PROPOSED GROUND FLOOR LAYOUT

Scale 1:50

SITE INVESTIGATION
Prior to the commencement of all excavations areas shall be checked with a CAT scan to determine the positions of existing services etc. The scanning equipment shall be kept on site for continuous checking during the carrying out of all excavation works.

STRIP FOUNDATION
Provide 225mm x 600mm concrete foundation, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

DPC
Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM.

WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845-1: 2013

SOLID FLOOR INSULATION UNDER SLAB
To meet min U value required of 0.22 W/m²K
Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide a 1200mm gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 75mm thick Celotex.

25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 65mm sand/cement finishing screed with light mesh reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

WALLS BELOW GROUND
All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

FULL FILL CAVITY WALL
To achieve minimum U Value of 0.28W/m²K
New cavity wall to comprise of 103mm facing brick to match existing. Inner leaf to be 100mm block e.g. Celcon or Toplite Standard with fully filled cavity of 85mm Dritherm 32/37 or 80mm Rockwool Cavity insulation. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

STEELS & LINTELS:
To all new external openings = L1/S 100 I.G Lintels or similar approved to suit opening sizes.

B1 = 1no. 254 x 146 x 37UB
Padstone R1 - None
Padstone R2 - 350 x 100 x 150h
Use 2no UBs bolted together 10mm bolts & spacer tubes @ 600c/c
B2 = 1no. 356 x 171 x 57UB
Padstone R1 - 350 x 250 x 150h
Padstone R2 - 350 x 250 x 150h
Use 2no UBs bolted together 10mm bolts & spacer tubes @ 600c/c

B3 = 1no. 356 x 171 x 57UB
Padstone R1 - 350 x 250 x 150h
Padstone R2 - 350 x 250 x 150h
Use 2no UBs bolted together 10mm bolts & spacer tubes @ 600c/c

For all padstone sizes, connection details and steel requirements please refer to structural engineer's calculations.

NOTE:
New roof in accordance with notes below and Eurocode 5 (Trada) span tables. Calculations to be based on BS EN 1995-1-1.

NOTE:
Exact runs of existing storm & foul drainage to be located on site. New RWP to be connected to existing drainage system or soakaway.

New UPVC facia and guttering to match existing

100mm x 75 wall plate as notes. Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres

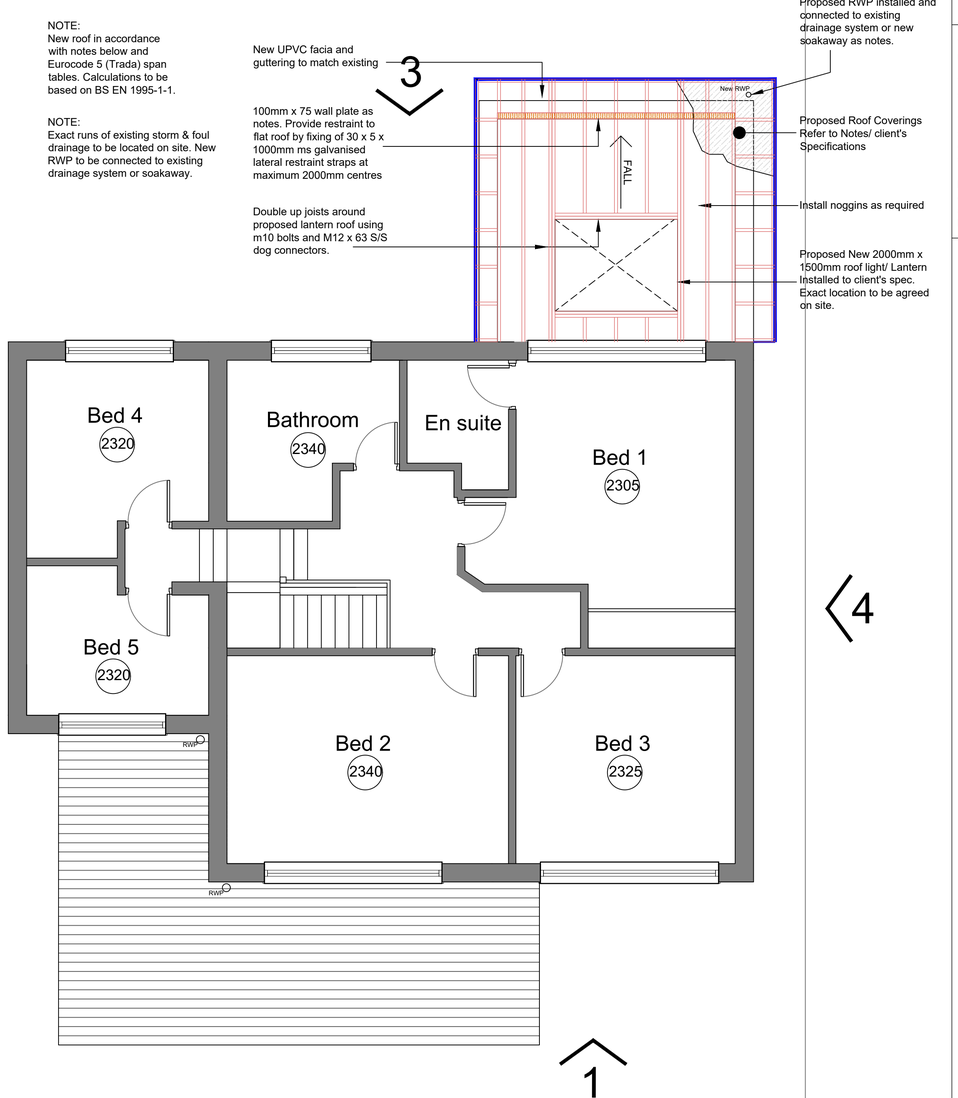
Double up joists around proposed lantern roof using m10 bolts and M12 x 63 S/S dog connectors.

Proposed RWP installed and connected to existing drainage system or new soakaway as notes.

Proposed Roof Coverings Refer to Notes/ client's Specifications

Install noggins as required

Proposed New 2000mm x 1500mm roof light/ Lantern Installed to client's spec. Exact location to be agreed on site.



PROPOSED FIRST FLOOR LAYOUT

Scale 1:50

INTERNAL STUD PARTITIONS
New partition to suit width of existing wall to be confirmed one site. Generally new studs to be 100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

SMOKE DETECTION
Mains operated linked smoke alarm detection system to BS EN 14604 and BS5839-6:2004 to at least a Grade D category LD3 standard and to be mains powered with battery back up. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/ storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings.

RAINWATER DRAINAGE
New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

EXISTING STRUCTURE
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

Indicates new 47 x 195mm C24 joists @ 600 c/c as flat roof note.

Indicates new 47 x 150mm C24 rafters @ 600 c/c as pitched roof note.

Indicates extent of new fascia.

WARM FLAT ROOF
(imposed load max 1.02 kN/m² - dead load max 0.75 kN/m²)
To achieve U value 0.18 W/m²K
Flat roof to be single ply membrane roofing providing aa fire rating for surface spread of flame with a current BBA or WIMLAS Certificate and laid to specialist specification. Single ply membrane to be fixed to 22mm exterior quality plywood over 125mm Celotex TA4000.
Insulation bonded to 22mm external quality plywood decking or similar approved on sw firings to minimum 1 in 80 fall on sw treated 47 x 195mm C24 flat roof joists at 600mm ctrs to give a max span of 4.25m or as Structural Engineer's details and calculations. Underside of joists to have 12.5mm foil backed plasterboard and skim. Provide cavity tray to existing house where new roof abuts existing house.
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres

BACKGROUND AND PURGE VENTILATION
Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²
Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°
Internal doors should be provided with a 10mm gap below the door to aid air circulation.
Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT TO KITCHEN
Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Cooker hoods to BS EN 13141-3.

ELECTRICAL
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 Building Control on completion.

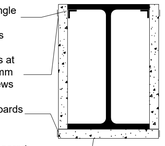
Notes.

The level of detail contained on this drawing is only relevant to its scale and purpose.

Where dimensions are shown relating to existing buildings/ structure/ site features these are all in millimeters and subject to confirmation on site. All dimensions are subject to change following stripping out or verification works.

Boundary positions shown represent existing situations on site and do not constitute a legal definition. Landowners are advised to verify all boundary positions and satisfy themselves of their legal right to build prior to commencement of work on site.

FIRE PROTECTION OF STEEL BEAM
(Glassroc F Firecase linings - as section C03 of the White Book installed to manufacturer's details)



Gypframe FEA1 steel angle suitably fixed to column flange at 600mm centres

Board screwed to angles at 150mm centres with 40mm Glassroc F firecase screws

Board fixed to vertical boards using screws as above

NOTE: Board joints staggered by minimum 600mm between adjacent sides.

15mm Glassroc F firecase boards Check thickness to suit size of steel prior to installation.

FIRE PROTECTION DETAIL

Scale 1:5

MTL Design
Design and Architectural Solutions
Drawing Produced By: Mr Ryan Edwards
TEL: 0121 469 0825 EMAIL: info@mtldesign.co.uk WEB: www.mtldesign.co.uk

Site Address
9 PARK VIEW
HOCKLEY HEATH
SOLIHULL
B94 6PE

Job
REAR EXTENSION & INTERNAL ALTERATIONS

Title
PROPOSED FLOOR PLANS

Scale
As Shown @ A1

Date
JAN 2022

Drg.No.
B94 21-37.02