CONSTRUCTION NOTES:

-MATERIALS AND WORKMANSHIP: All work to be carried out in accordance with the relevant Codes of Practice.

All materials used to comply with British Standard specifications.

-SUB-CONTRACTORS: The contractor shall be responsible for co-ordinating and checking all work by specialist sub-contractors.

PART A - STRUCTURE - AS PER S.E DESIGN & CALCULATIONS

-STRUCTURAL CALCULATIONS: To be provided not less than 28 days prior to the relevant section of the work commencing on site -STEEL FRAME: To be to structural Engineer's details and design.

-RESTAINT STRAPS: At roof & wall junctions not exceeding 2m spacing

-STRUCTURAL TIMBER: To be strength class SC3 (C16) or SC4 (C24), unless otherwise specified.

All structural timber to be preservation treated to resist rot and infestation attack.

-FOUNDATIONS: To loadbearing walls and below finished ground level and taken down to a suitable bearing strata as agreed on site with the Local Authority's Building Inspector and in accordance with Structural Engineers recommendations and latest details.

-EARTHWORKS AND CIVILS: All earthworks to be undertaken to structural Engineer's details and design.

-DRYLINED WALLS: Walls to be insulated/dry lined internally. 1200 guage DPM, 100x50 s.w. treated timber @600 centres, 100mm celotex rigid insulation between study, tyvek breather membrane. 12.5mm vapour check gypsum plasterboard fixed to study to receive 2x coat skim finish.

-EXTERNAL LINTELS: To be I.G. or similar approved galvanised mild steel insulated lintels with minimum 150mm end bearings or steel beams to Structural Engineer's details,

all with preformed cavity trays with stop ends and proprietary weepholes over.

-INTERNAL LINTELS: Pre-cast reinforced concrete lintels with minimum 100mm end bearings for spans less than 900mm or 150mm bearing for spans of 900mm or more.

-WALL TIES: Stainless steel wall ties to be provided as follows: 750mm centres horizontally and 450mm centres vertically. Each course of wall ties to be staggered 450mm.

Extra ties to be used at corners and within 225mm of opening reveals as required by cavity closer manufacturer's instructions, but at 225mm centres vertically generally. Wall ties to be suitable for the type of insulation specified and additional wall ties should be used to suit insulation manufacturer's requirements as necessary.

-LOFT FLOOR: 18mm Caber deck flooring on joists 225x50@400 ctrs. Joists to run alongside existing ceiling joists and connected with 15mm M22 bolts@1m ctrs. 100mm rockwool mineral wool insulation between floor joists

PART B - FIRE

-WALL AND CEILING FINISHES: To be 12.5mm Gypsum plaster board with x2 coat skim finish. FIRE DOORS to be FD30 to circulation areas with intumescent strips

-STEELWORK GENERAL: To be painted with intumescent paint to give one hour fire resistance. (additional decorative fire proof finishes will be required where steelwork is visible)

-STEEL BEAMS / COLUMNS: Fully or partially obscured by studwork / conc. floors construction to be fire protected prior to erection of other elements.

-FIRE RESISTING DOORS: To be (FD30S - FD60S) with 13/25mm rebate in frame, recessed intumescent strips, cold smoke seals and self closing device. -SMOKE DETECTORS: Battery operated smoke detectors to be installed to circulation spaces on ground and first floor

PART C - RESISTANCE TO MOISTURE

-DPC: To be Marley 'Homeguard' or similar approved to brick/block walls minimum 150mm above ground level externally and at floor level internally.

-WALLS BELOW DPC: To be common brickwork/ below ground blockwork in cement/sand mortar (1:3) with minimum 3 courses semi-engineering brick splash course

to outer leaf. Fill cavity to 150mm below DPC with low strength concrete struck to outer leaf and with weepholes at 900mm centres.

-DPM: To be 1200g polythene/ proprietary radon barrier with lapped and taped joints laid under floor slab and dressed up walls and under DPC.

-VERTICAL DPC: To external openings to be Thermabate/ Catnic cavity closer system sized to suit cavity width, with cavity trays with stop ends and weepholes over all cavity bridges.

-CAVITY TRAYS: Proprietary cavity trays with stop ends and corner units above all cavity bridges.

Proprietary stepped cavity trays at roof/wall abutments with Code 4 lead flashings, externally. -WEEPHOLES: To be positioned every fourth perpend over DPC and cavity trays with minimum 2 over window/ door openings. Weepholes to be filled with proprietary

plastics drain duct (colour to match masonry).

PART D - CAVITY INSULATION

-To be rockwool mineral insulation type. Please refer to U-value calculations

PART F - VENTILATION

-OCCUPIABLE ROOMS (With opening windows/ rooflights): Occupiable rooms to have rapid ventilation, providing a minimum total free area

of not less than 1/20th of its floor area with background ventilation by trickle vents in window heads, two position casement fasteners or air bricks

all fitted with insect mesh giving a minimum total free area per room of 4000mm sq. for rooms up to 10m sq. and 400mm sq./m sq. for all rooms above 10m sq.

-OCCUPIABLE ROOMS (Without opening windows/ rooflights): Occupiable rooms to have mechanical ventilation of not less than 8 litres/second per person of

fresh air.

-BATH/SHOWER ROOMS (With opening windows): Shall be provided with at least one opening window with background ventilation by trickle vents in window heads, two position casement fasteners or air bricks all fitted with insect mesh giving a minimum total free area of 4000mm sq. per bath/shower together with extract ventilation providing extraction at a rate of 15 litres/second per bath/shower.

-BATH/SHOWER ROOMS (Without opening windows): To have extract ventilation providing extraction at a rate of 15 litres/second per bath/shower with 15 minute timed overrun and automatic switching, operated by light switch.

-UTILITY ROOM: To have extraction vetilation providing extraction at a rate of 30 litres/second

PART G - SANITARY FACILITIES

WATER EFFICIENCY: All water appliances to be fitted with efficiency fittings.

-HOT WATER SUPPLY & SYSTEMS: thermostatic under bath blending valve Sirrus or similar control measure to be fitted to prevent bath water exceeding 48 degrees

PART H - DRAINAGE

-DRAINAGE - To connect to existing drainage system

-DRAINAGE: To be 100/150/225/450mm diameter vitrified UPVC flexible jointed drainage system laid to manufacturers recommendations on bed and surround of granular material. -DRAINS UNDER BUILDINGS: To be adequately protected, on bed and surround of granular material with lintelled opening to give 50mm clearance all round drains passing

through or over footings. Voids around pipes to be filled with mineral fibre and cloaked both sides with rigid sheet material to prevent ingress of backfill and vermin

-SPECIAL PROTECTION: Concrete slabs over trench to drains with less than 600mm cover, for drains under pedestrian traffic areas, 100mm reinforced concrete bridging over trench to drains with less than 900mm cover, for drains under roads and drives.

-ACCESS FITTINGS: 225mm diameter vitrified clayware/ UPVC, 600mm or 750mm deep with integral cover.

areas to be grade 'A' heavy duty ductile covers. Internal covers to be air tight double sealed screw down type.

-INSPECTION CHAMBERS: 450mm diameter, polypropylene maximum depth 1000mm.

-MANHOLES: Of pre-cast concrete/ 215mm Class B engineering bricks, on 150mm in-situ concrete slab to CP 110. Galvanised step irons to be provided to manholes over 1000mm deep. -MANHOLE COVERS: To soft landscaped areas to be grade 'C' light duty ductile covers, to light vehicular areas to be grade 'B' medium duty ductile covers and to heavy vehicular

-SOAKAWAYS: Of pre-cast concrete/ trench fill, to be positioned minimum 5m from any building or boundary subject to satisfactory percolation test being undertaken by the contractor

and the soakaway being designed in accordance with BRE Digest 365. All to the approval of the Local Authority Building Control. -RAINWATER GOODS: To be in UPV or aluminium PPCC designed in accordance with manufacturers published data and sizing schedules in H3 table 1 and 2.

-INTERNAL DRAINAGE: 100mm diameter soil and vent pipe with collection manifold in UPVC to terminate with cage minimum 900mm above any opening within 3000mm, or 'Durgo' proprietary air admittance valve. 100mm diameter wastes to W.C's, 40mm diameter wastes to baths, sinks, washing machines and showers and 32mm diameter wastes to basins.

All fittings to have 75mm deep seal traps. Access plugs to be provided at all 90 degree changes in direction.

PART J - HEATING, FLUES AND CHIMNEYS

-FLUE 1: From gas fired boiler to be balanced type situated minimum 600mm from any opening or corner and fitted with wire guard.

-HEATING GROUND FLOOR: Central heating by radiators connected to existing boiler

-HOT WATER: From hot water storage tank with dual element immersion heater or combi boiler. Existing boiler to be checked if adequate by heating engineer

-HEATING INSTALLATION: All pipes and ducts to be insulated to BS5422. Hot and cold water storage tanks to be insulated.

-ZONE CONTROLS: to be room thermostats and/ or thermostatic radiator valves

-TIMING CONTROLS: to be provided to control the periods when the heating systems operate. -BOILER CONTROL INTERLOCKS: to be as follows:

Gas fired central heating controls should switch the boiler off when no heat is required whether by room thermostats or thermostatic radiator valves-

- Systems controlled by thermostats, should fire only when a space heating or cylinder thermostat is calling for heat.

- Systems controlled by thermostatic radiator valves, should be fitted with flow control or other devices to prevent unnecessary boiler cycling.

PART K - STAIRWAYS, RAMPS AND ACCESS

-DESIGN CRITERIA: unobstructed width 800mm, max pitch 42 degree, max rise 220mm, min going 220mm.

-HEADROOM: Vertical clearance minimum 2000mm to be maintained above pitch line.

extending 150mm beyond the edges of the flight (minimum 1500mm).

-HANDRAIL: To stairways minimum height above pitch line; flights 900mm, landings 1100mm. -BALUSTRADING: To be fixed so that a sphere of 100mm cannot pass through between balusters and the handrail is designed so as to provide resistance from climbing.

-PROTECTION FROM COLLISION: Parts of windows, skylights and ventilators internally and externally, that project more than 100mm horizontally into floor spaces shall be: not less than 2000mm above the ground or floor when in any fixed position, or

marked by a feature such as a barrier or rail at 1100mm high to prevent people walking into the projecting part, or marked by provision of surfaces with strong tactile differences, (i.e. cobbles), or by suitable landscaping features so that people are guided away from them.

In spaces which are used infrequently, and only for the purposes of maintenance or repair, provisions such as clear marking of the projecting part to make it easy to see will be provided.

-RAMPED ACCESS: To have a maximum gradient of 1:12/ 1:15/ 1:20 with minimum overall width of 1200mm, 1000mm clear [Section M]

-STEPPED APPROACH: To have minimum clear width of 1000mm with maximum 150mm rise and minimum 280mm going. Flights not to exceed a maximum height of 1200mm. Landings to be provided at top, bottom and intermediate positions as necessary with a minimum unobstructed length of 1200mm. Handrails to be provided at 900mm high extending 300mm beyond top and bottom nosings and terminating with closed ends. Tactile 'corduroy' paving to demarcate head of stair to be provided 400mm back from top nosing for a depth of 800mm and PROTECTION FROM COLLISION: Parts of windows, skylights and ventilators internally and externally,

that project more than 100mm horizontally into floor spaces shall be;

- not less than 2000mm above the ground or floor when in any fixed position, or
- marked by a feature such as a barrier or rail at 1100mm high to prevent people walking into the projecting part, or
- marked by provision of surfaces with strong tactile differences, (i.e. cobbles), or by suitable landscaping features so that people are guided away from them In spaces which are used infrequently, and only for the purposes of maintenance or repair, provisions such as clear marking of the projecting part to make it easy to see

PART L - THERMAL INSULATION

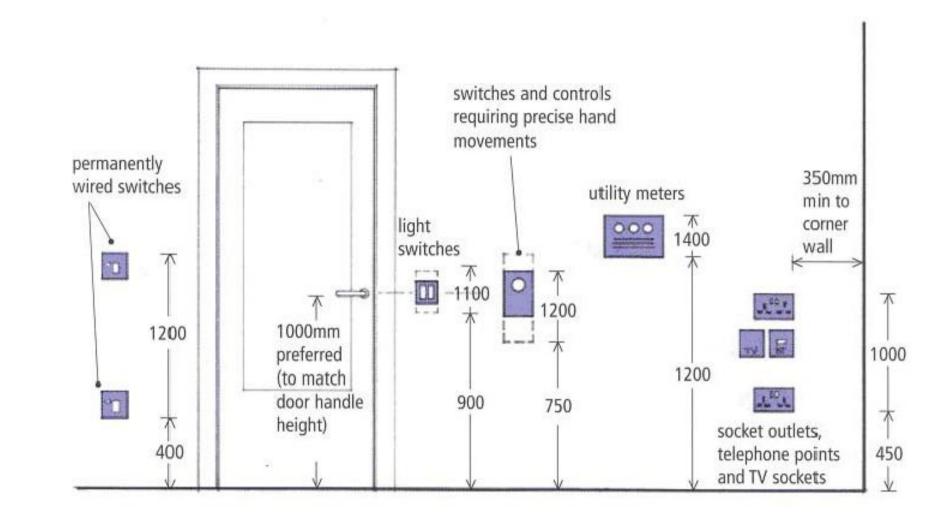
will be provided.

-U VALUES: Building construction elements to meet the requirements of L1 table 1 and diagram 1.

All work to be designed and constructed on the basis of current u-values contact celotex.

-EXTERNAL WALLS 1: Ref u-values

- -COLD BRIDGING: Lintols to all external openings to be solid insulated and of approved types, reveals to have
- Thermabate or similar cavity closers.
- -SLOPING CEILING ROOF INSULATION: Ref U-values
- -SPACE HEATING CONTROLS: Via thermostatic radiator valves -LIGHTING DESIGN: Lighting design to be provided to meet the requirements of L1 1.54 and table 4.
- -CERTIFICATION: To be provided by the insulation installer confirming that appropriate detailed design, details and installation has been carried out that will achieve reasonable conformity with the regulations OR confirming that infrared monitoring has been undertaken and that it shows the insulation to be reasonably continuous over the visible envelope.



PART M - ACCESS & DDA CONTINUED

Setting out of electrical sockets and switches

PART N - GLAZING

Area of window openings, not to exceed 30% of total floor area in residential building.

Area of roof light openings, not to exceed 20% of total roof area. All glazing to be double glazed and 100% draught stripped.

CRITICAL LOCATIONS: In internal and external walls. Where the requirements of safe breakage applies the use of laminated or toughened glass must be employed. Toughened or laminated glass to BS 6206 should be installed in the following locations:

- Where a window/ panel glazing will be within 800mm above finished floor level.
- Where door glazing will be within 1500mm above finished floor level.
- Where window/ panel glazing is within 300mm of a door opening and 1500mm above finished floor level.

PART P - Electrical installation to be carried out by certified electrician, certificate to be issued to BC on completion Interlinked smoke detectors to be provided to all circulation spaces. Heat detector to be installed in kitchen

MATERIALS NOT TO BE USED

- High Alumina Cement in structural elements
- Woodwool Slabs in permanent formwork to concrete
- Calcium Chloride in admixtures for use in reinforced concrete
- Asbestos products
- Naturally occurring aggregates for use in reinforced concrete which do not comply w

ith British Standard 882: 1983 and/ or naturally occurring aggregates for use in concrete which do not comply with British Standard 8110: 1985.



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Project Title:

PROPOSED INTERNAL ALTERATIONS TO **EXISTING RESIDENTIAL UNIT** 11B CANON FROME COURT LEDBURY HR8 2TD

MR & MRS OUTTERSIDE

Drawing Title:

Specification

Dwg No:

Client:

File Number: CF1 Drawn By: MDL Checked By: MDL

11

Rev:

Scale@A1: nts **Date:** 12/07/22