BUILDING REGULATION NOTES

SITE PREPERATION:

Ground to be prepared for the new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must be also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g., landfill gases, radon, vapours etc., on or in the ground covered, or to be covered by the building.

EXISTING STRUCTURE:

Existing structure including foundations, beam, 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.

BEAMS:

New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifires S or similar intumescent paint to provided ½ hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

LINTELS:

Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of works on site. Provide proprietary Insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufactures standard tables. Stop ends, DPC trays and weep holes to be provided above externally located lintels.

TRENCH FOUNDATION:

Provide 600mm wide trench fill foundations, concrete mix to conform to BS EN206-1 and BS 8500-2. All foundation to be a minimum of 1000mm below ground level, exact depth to be agreed on site with the 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. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any major tree roots in excavation, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought. Foundation indicated are provisional only and may vary according to the nature of the sub-soil encountered on the site.

WALLS BELOW GROUND:

All new walls Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground 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 weep holes.

SOLID FLOOR INSULATION OVER SLAB:

To meet max U-Values required of 0.22W/m²K. Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide 150mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over a 1200mm gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with a min 75mm thick Celotex GA4000. 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. Finish with 75mm sand/cement finishing screed with light mesh reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide and 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 with 100mm concrete cover lad under the extension. Pipes to terminate at new 65mm x 215mm air bricks with cavity tray over.

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 Vertical DPC to be installed at all reveals where cavity is closed.

EXTERNAL CAVITY WALL:

300mm (to match with existing) cavity wall with full fill insulation: 100mm facing bricks 100mm cavity filled with glass wool cavity batts 100mm lightweight aggregate block load bearing inner skin (3.5N Cemex 'Readyblock' 850) with Thistle 'Hardwall' plaster. All to give an anticipated U-Value of 026W/m²K.

WALL TIES:

All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm centres horizontally, 450mm vertically and 225mm centres at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5628-6.1: 1996 and BS EN845-1:2003.

CAVITIES:

Provide Cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non-combustible insulated cavity closers. Provide vertical DPC's around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mmcentres.

EXISTING TO NEW WALL:

Where new walls abut the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles. Mechanical joints to wall to junction Furfix or similar with 2-part polysulphide mastic. Bed joint reinforcement to be provide above and below window openings.

PITCHED ROOF INSULATION AT RAFTER LEVEL:

To achieve max U-Value 0.18W/m²K. Roofing tiles (Roman Interlocking) to match existing colour and style (unless otherwise stated on the drawings) and suitable for pitched on tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate, supported on rafters as indicated on rafter plan. Rafters on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 100mm Celotex GA4000 between rafters and 52mm Celotes PL4000 (or equivalent) under rafters. Provide 5mm skim coat of finishing plaster to underside of ceiling. 100mm x 50mm wall plate strapped down to walls. Rafters to be strapped to walls and existing main walls. All straps to be 1000 x 30 x5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

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 Service 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.

INTERNAL LIGHTING:

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING:

Extend existing heating system throughout extension. Provide TVR's to all radiators.

SMOKE DETECTION:

Mains operated linked smoke detection system to BS EN 14604 and BS5839-6-2004 to be at least a Grade D category LD£ standard and to be to mains powered with battery backup. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/storey and within 7.5m of the door to every habitable room. If ceiling mounted, they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

ROOF LIGHTS:

Max U-Value of 1.6W/m²K. Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacture's instructions with rafters doubled up to sides and suitable flashings etc.

NOTES

REV	DATE	BY	REVISION
00	JAN19	KA	FIRST ISSUE

ALFORD ENGINEERING

Project Title and Client:

R. ALFORD
1 CROMWELL ROAD
CM6 3GE

Drawing Title:

GENERAL NOTES
SHEET 2 OF 3

PROJECT No.	2019/NC/0001		
DRAWN BY:	KMA	DATE	JAN 19
DESIGNED BY	——	DATE	——
CHECKED BY:	——	DATE	——
DWG No.	P/0001/02	REV:	00

ORIGINAL DRAWING SIZE A3